Access DB# 58662

SEARCH REQUEST FORM

Jan

Scientific and Technical Information Center

Requester's Full Name: Ganapathy Krishnan Examiner #: 79271 Date: 3/10/03
Art Unit: 1623 Phone Number 305-4837 Serial Number: 10/682,743
Mail Box and Bldg/Room Location: 8D08 Results Format Preferred (circle): PAPER DISK E-MAIL
8B19

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Please see bib sheet.

Inventors (please provide full names): Elias Humberto Hermida Ochoa.

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search for a method for treatment of degeneration of articular cartilage caused by osteoarthritis using a viscoelastic solution of chondroitin sulfate and sodium hyaluronate.

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

8D08

****

STAFF USE ONLY

Searcher: JD	**Type of Search**	**Vendors and cost where applicable**
Searcher Phone #: 4498	NA Sequence (#)	STN ✓
Searcher Location:	AA Sequence (#)	Dialog
Date Searcher Picked Up: 3/5/03	Structure (#)	Questel/Orbit
Date Completed: 3/5/03	Bibliographic ✓	Dr.Link
Searcher Prep & Review Time:	Litigation	Lexis/Nexis
Clerical Prep Time: 15	Fulltext	Sequence Systems
Online Time: +90	Patent Family	WWW/Internet
	Other	Other (specify)

PTO-1590 (8-01)

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=> d his

     (FILE 'HOME' ENTERED AT 16:16:14 ON 15 MAR 2003)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 16:16:25 ON 15 MAR 2003
               E CHONDROITIN SULFATE/CN
L1             1 S E3
L2           136 S 9007-27-6/CRN AND 7664-93-9/CRN
L3            11 S L2 AND 2/NC
L4             3 S L2 AND 9067-32-7/CRN
L5             2 S L4 NOT C4H6O2S
L6             1 S 9067-32-7
L7             1 S 9004-61-9
L8             3 S 9004-61-9/CRN AND L2
L9             1 S L8 AND 3/NC

     FILE 'HCAPLUS' ENTERED AT 16:18:30 ON 15 MAR 2003
L10            9 S L5 OR L9
L11         7390 S L1 OR L3
L12        11657 S CHONDROITIN(S)(SULFATE OR SULPHATE)
L13          361 S CHONDROITINSULFATE OR CHONDROITINSULPHATE
L14          200 S CHONDROITIN()(SULFURIC OR SULPHURIC)()ACID
L15        11512 S CHONDROITIN(1W)(SULFATE OR SULPHATE OR (SULFURIC OR SULPHURIC
L16         1628 S (CHONDROITINSULFURIC OR CHONDROITINSULPHURIC)()ACID
L17        13151 S L11-L16
L18         1406 S L6
L19         1729 S (NA OR SODIUM)()(HYALURONATE OR HYALURON OR HYALURONIC ACID)
L20           83 S HEALON OR HYALGAN
L21           25 S ARTZ OR FCH 200
L22         1862 S L18-L21
L23         9531 S L7
L24        12860 S HYALURONATE OR HYALURON OR HYALURONIC ACID
L25         2450 S HYALURONAN
L26           65 S HYALURONAN (S) (NA OR SODIUM OR SODIUM SALT)
L27         4638 S L17 AND L19-L26
L28          247 S L27 AND L22

     FILE 'REGISTRY' ENTERED AT 16:28:28 ON 15 MAR 2003
L29           11 S L1 OR L3
               SEL RN
L30           58 S E1-E11/CRN
L31           56 S L30 NOT L5,L9
L32           38 S L31 NOT (MXS OR IDS)/CI
L33           18 S L31 NOT L32
L34          262 S CHONDROITIN(L)SULFATE
L35           88 S L34 AND SALT
L36           63 S L35 NOT (MXS OR IDS)/CI
L37           31 S L36 NOT (COMPD OR WITH)

     FILE 'HCAPLUS' ENTERED AT 16:31:37 ON 15 MAR 2003
L38          484 S L37
L39        13232 S L17,L38
L40          260 S L39 AND L22
L41         4647 S L39 AND L23-L26
L42          260 S L40,L41 AND L22
L43          260 S L28,L42
L44           50 S L43 AND GEL?
L45           24 S L43 AND VISCOELAST?
L46            1 S L43 AND INTRAARTICUL?
L47            2 S L43 AND INTRA ARTICUL?
L48           72 S L44,L45 NOT L46,L47
L49           23 S L48 AND EYE?/CW
```

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 = 703-308-4498
jan.delaval@uspto.gov

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                SEL DN AN 17
L50           1 S L49 AND E12-E14
L51          49 S L48 NOT L49
                SEL DN AN 5 24 38
L52           3 S E15-E23 AND L51
                E CARTILAGE/CT
L53       11561 S E3-E25
                E E3+ALL
L54       14712 S E7+NT
                E JOINT/CT
L55        4768 S E6-E28
                E E5+ALL
L56        1255 S E2
                E JOINT/CT
                E E6+ALL
L57        8912 S E6,E5+NT
L58        2604 S E13+NT
                E OSTEOARTHRITIS/CT
L59        1853 S E3
                E E3+ALL
L60        2870 S E11,E12,E10+NT
L61           7 S CHONDRAL(L)LESION
L62          72 S ?CHONDRAL?(L)LESION
L63          17 S L43 AND L53-L62
                SEL DN AN 3
L64           1 S L63 AND E1-E3
                SEL DN AN L63 1 5 17
L65           3 S E4-E12 AND L63
L66          15 S L10,L50,L52,L64,L65
                E OCHOA/AU
L67           7 S E95
                E HERMIDA/AU
                E HUMBERTO/AU
                E ALCON/PA,CS
                E ALCOM/PA,CS
L68         786 S E3-E8
L69         785 S ALCON?/PA,CS
L70          12 S L67-L69 AND L43
L71           1 S L67-L69 AND L10
L72           2 S L67-L69 AND L66
L73          15 S L66,L71,L72
L74          10 S L70 NOT L73
L75          15 S L73 AND L10-L28,L38-L74
L76          10 S L74 AND L10-L28,L38-L75

=> fil reg
FILE 'REGISTRY' ENTERED AT 16:53:16 ON 15 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   13 MAR 2003  HIGHEST RN 499099-49-9
DICTIONARY FILE UPDATES:  13 MAR 2003  HIGHEST RN 499099-49-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.
```

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s l5 or l9
L77 3 L5 OR L9

=> d ide can tot

L77 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 153311-76-3 REGISTRY
CN Chondroitin, hydrogen sulfate, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hyaluronic acid, sodium salt, mixt. contg. (9CI)
MF H2 O4 S . x Unspecified . Unspecified
CI MXS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9007-28-7
CMF H2 O4 S . x Unspecified

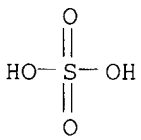
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:144233

L77 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 123352-36-3 REGISTRY

CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hyaluronic acid, sodium salt, mixt. contg. (9CI)
OTHER NAMES:
CN Viscoat
MF H2 O4 S . x Na . x Unspecified . Unspecified
CI MXS
SR CA
LC STN Files: BIOBUSINESS, BIOSIS, CA, CAPLUS, CIN, MEDLINE, PHARMASEARCH, PROMT, TOXCENTER, USPATFULL

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

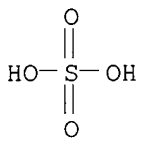
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



7 REFERENCES IN FILE CA (1962 TO DATE)
7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:83679

REFERENCE 2: 135:55996

REFERENCE 3: 131:139516

REFERENCE 4: 130:32985

REFERENCE 5: 127:824

REFERENCE 6: 122:274105

REFERENCE 7: 111:187541

L77 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 108145-77-3 REGISTRY
CN Chondroitin, hydrogen sulfate, mixt. with hyaluronic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hyaluronic acid, mixt. contg. (9CI)
MF **H2 O4 S . x Unspecified . Unspecified**
CI MXS
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 9004-61-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9007-28-7
CMF H2 O4 S . x Unspecified

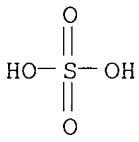
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 106:188973

=> d ide can 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **9067-32-7** REGISTRY
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Artz
CN Bio Hyaluro 12
CN FCH 200
CN FCH 248
CN HA-Q
CN HA-Q 1

CN Healon
CN Healon (polysaccharide)
CN Healon GV
CN Hyalart
CN Hyalein
CN Hyalgan
CN Hyladerm
CN Nidelon
CN NRD 101
CN Opegan
CN Orthovisc
CN SI 4402
CN SL 1010
CN SLM 10
CN Sodium hyaluronate
CN SPH
DR 34448-35-6
MF Unspecified
CI PMS, COM, MAN
PCT Manual registration, Polyother, Polyother only
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
1402 REFERENCES IN FILE CA (1962 TO DATE)
57 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1406 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:158867

REFERENCE 2: 138:158860

REFERENCE 3: 138:158840

REFERENCE 4: 138:142492

REFERENCE 5: 138:127015

REFERENCE 6: 138:126891

REFERENCE 7: 138:117178

REFERENCE 8: 138:112513

REFERENCE 9: 138:112480

REFERENCE 10: 138:112252

=> d ide can l7

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **9004-61-9** REGISTRY
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN ACP
CN ACP (polysaccharide)
CN ACP gel
CN Durolane

CN Hyaluronan
CN Hylartil
CN Luronit
CN Mucoitin
CN Sepracoat
CN Sofast
CN Synvisc
DR 9039-38-7, 37243-73-5, 29382-75-0
MF Unspecified
CI PMS, COM, MAN
PCT Manual registration, Polyester, Polyester formed
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
9448 REFERENCES IN FILE CA (1962 TO DATE)
711 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9462 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:175923

REFERENCE 2: 138:175749

REFERENCE 3: 138:175701

REFERENCE 4: 138:175682

REFERENCE 5: 138:172181

REFERENCE 6: 138:170404

REFERENCE 7: 138:168381

REFERENCE 8: 138:168132

REFERENCE 9: 138:167834

REFERENCE 10: 138:167658

=> d ide can tot l29

L29 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 185323-66-4 REGISTRY
CN Chondroitin, octakis(hydrogen sulfate) (9CI) (CA INDEX NAME)
MF **H2 O4 S . 1/8 Unspecified**
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

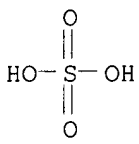
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:141392

REFERENCE 2: 126:75185

L29 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 163063-19-2 REGISTRY
CN Chondroitin, tris(hydrogen sulfate) (ester) (9CI) (CA INDEX NAME)
MF **H2 O4 S . 1/3 Unspecified**
SR CA
LC STN Files: CA, CAPLUS

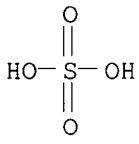
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:289056

L29 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 143928-11-4 REGISTRY
CN Chondroitin, tetrakis(hydrogen sulfate) (ester) (9CI) (CA INDEX NAME)
MF **H2 O4 S . 1/4 Unspecified**
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

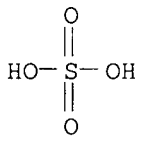
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:141392

REFERENCE 2: 126:75185

REFERENCE 3: 117:178119

L29 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 143928-10-3 REGISTRY
CN Chondroitin, hexakis(hydrogen sulfate) (ester) (9CI) (CA INDEX NAME)
MF **H2 O4 S . 1/6 Unspecified**
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

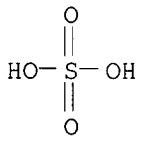
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:75185

REFERENCE 2: 117:178119

L29 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 129837-56-5 REGISTRY
CN Chondroitin, 2'-(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Chondroitin 8-sulfate
MF **H2 O4 S . Unspecified**
CI COM
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS

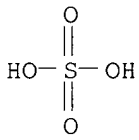
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:100352

REFERENCE 2: 115:64715

REFERENCE 3: 113:154827

L29 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 129837-55-4 REGISTRY
CN Chondroitin, 2',4-bis(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Chondroitin 4,8-disulfate
MF **H2 O4 S . 1/2 Unspecified**
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS

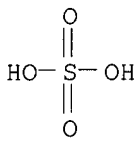
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:100352

REFERENCE 2: 113:154827

L29 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 81988-93-4 REGISTRY
CN Chondroitin, 4,6-bis(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Chondroitin 4,6-disulfate
CN Chondroitin 4/6-sulfate
CN Chondroitin sulfate A-chondroitin sulfate C mixture
CN Chondroitin sulfate AC
CN Chondroitinsulfuric acid, type AC
DR 58449-35-7
MF **H2 O4 S . 1/2 Unspecified**
CI COM
PCT Manual registration
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

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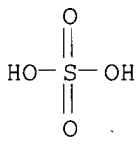
CMF H2 O4 S



61 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
61 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:236879

REFERENCE 2: 135:17239

REFERENCE 3: 134:190011

REFERENCE 4: 132:178219

REFERENCE 5: 129:160200

REFERENCE 6: 129:50629

REFERENCE 7: 128:189802

REFERENCE 8: 128:100690

REFERENCE 9: 128:99486

REFERENCE 10: 127:203952

L29 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 50814-15-8 REGISTRY
CN Chondroitin, 2',6-bis(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Chondroitin 2',6-disulfate
CN Chondroitin, sulfate D
CN Chondroitinsulfuric acid, type D
MF **H2 O4 S . 1/2 Unspecified**
PCT Manual registration
LC STN Files: ANABSTR, BIOSIS, CA, CAPLUS, CHEMCATS, MEDLINE, TOXCENTER

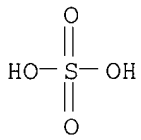
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



37 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
37 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:120035

REFERENCE 2: 136:319391

REFERENCE 3: 135:339800

REFERENCE 4: 135:147692

REFERENCE 5: 134:37548

REFERENCE 6: 133:322084

REFERENCE 7: 133:160235

REFERENCE 8: 132:292466

REFERENCE 9: 132:104396

REFERENCE 10: 131:68233

L29 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 25322-46-7 REGISTRY
CN Chondroitin, 6-(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Chondroitinsulfuric acids, type C (8CI)
OTHER NAMES:
CN Chondroitin 6-sulfate
CN Chondroitin C sulfate
CN Chondroitin sulfate C
CN Chondroitin sulfate type C
CN Chondroitin sulfuric acid C
CN Chondroitin sulphate C
CN Chondroitin-6-sulfuric acid
CN Chondroitinsulfuric acid, type C
DR 9045-60-7, 49718-76-5
MF **H2 O4 S . Unspecified**
CI COM
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

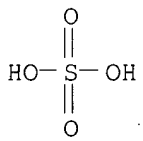
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



1872 REFERENCES IN FILE CA (1962 TO DATE)
97 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1873 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:158745

REFERENCE 2: 138:126851

REFERENCE 3: 138:102281

REFERENCE 4: 138:100348

REFERENCE 5: 138:95059

REFERENCE 6: 138:88443

REFERENCE 7: 138:87021

REFERENCE 8: 138:83028

REFERENCE 9: 138:70386

REFERENCE 10: 138:44720

L29 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 24967-93-9 REGISTRY
CN Chondroitin, 4-(hydrogen sulfate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Chondroitinsulfuric acids, type A (8CI)
OTHER NAMES:
CN Chondranol
CN Chondroitin 4-sulfate
CN Chondroitin 4-sulfuric acid
CN Chondroitin A sulfate
CN Chondroitin sulfate A
CN Chondroitin sulfate type A
CN Chondroitinsulfuric acid A
CN Chondroitinsulfuric acid type A
CN Chondroitinsulfuric acid, type A
CN Org 10172
CN Translagen
CN Turkadon
DR 12643-04-8, 9040-92-0, 9045-58-3
MF **H2 O4 S . Unspecified**
CI COM
PCT Manual registration
LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, NAPRALERT, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

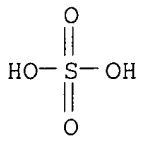
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



2165 REFERENCES IN FILE CA (1962 TO DATE)
96 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2167 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:102281

REFERENCE 2: 138:100348

REFERENCE 3: 138:88443

REFERENCE 4: 138:88197

REFERENCE 5: 138:70386

REFERENCE 6: 138:63051

REFERENCE 7: 138:44720

REFERENCE 8: 138:33368

REFERENCE 9: 138:22339

REFERENCE 10: 137:380014

L29 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 9007-28-7 REGISTRY
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Chondroitinsulfuric acids (8CI)
OTHER NAMES:
CN Chondroitin polysulfate
CN **Chondroitin sulfate**
CN Chondroitin sulphate
CN Chondroitinsulfuric acid
CN Chonsurid
DR 9046-20-2, 9062-29-7, 11120-14-2, 56480-79-6
MF **H2 O4 S . x Unspecified**
CI COM
PCT Manual registration
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PHAR, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

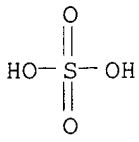
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



4890 REFERENCES IN FILE CA (1962 TO DATE)
314 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4896 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:175914

REFERENCE 2: 138:172181

REFERENCE 3: 138:168132

REFERENCE 4: 138:168094

REFERENCE 5: 138:166260

REFERENCE 6: 138:166242

REFERENCE 7: 138:158905

REFERENCE 8: 138:158821

REFERENCE 9: 138:150822

REFERENCE 10: 138:142516

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FILE LAST UPDATED: 14 Mar 2003 (20030314/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L75 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **2003:76549** HCAPLUS
DN **138:112513**
TI Cartilage repair and regeneration scaffold and method
IN Plouhar, Pamela Lynn; Malaviya, Prasanna; Schwartz, Herbert Eugene
PA Depuy Products, Inc., USA
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 9
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003007879	A2	20030130	WO 2002-US22411	20020715
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003033021	A1	20030213	US 2002-195334	20020715
PRAI	US 2001-305786P	P	20010716		
	US 2002-388724P	P	20020614		

AB A method for the repair of a cartilaginous tissue defect and a cartilage repair device are disclosed. In the method for the repair of a cartilaginous tissue defect, a device comprising a synthetic polymer is implanted into a space subsequent to removal of the defect, and a biol. lubricant is administered at the site of the defect. The device comprises a synthetic polymer and a biol. lubricant.
ST cartilage repair scaffold polymer lubricant
IT Liver
(basement membrane; cartilage repair and regeneration scaffold and method)
IT Lubricants
(biol.; cartilage repair and regeneration scaffold and method)
IT Animal tissue culture
Cartilage
Extracellular matrix
Regeneration, animal
Sterilization and Disinfection
Surgery
(cartilage repair and regeneration scaffold and method)
IT Polymers, biological studies
RL: DEV (Device component use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cartilage repair and regeneration scaffold and method)
IT Head
(comb, **hyaluronate** lubricant from; cartilage repair and regeneration scaffold and method)
IT Prosthetic materials and Prosthetics
(implants; cartilage repair and regeneration scaffold and method)
IT **Joint, anatomical**
(**knee**, repair of; cartilage repair and regeneration scaffold

and method)
IT **Synovial fluid**
(lubricant; cartilage repair and regeneration scaffold and method)
IT Glycosaminoglycans, biological studies
Vitronectin
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lubricant; cartilage repair and regeneration scaffold and method)
IT Textiles
(medical; cartilage repair and regeneration scaffold and method)
IT **Joint, anatomical**
(**meniscus**; cartilage repair and regeneration scaffold and method)
IT Intestine
(small, submucosa; cartilage repair and regeneration scaffold and method)
IT Bladder
Stomach
(submucosa; cartilage repair and regeneration scaffold and method)
IT 2453-03-4, Trimethylene carbonate 9002-89-5, Polyvinyl alcohol 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone 26009-03-0, Polyglycolic acid 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26124-68-5, Polyglycolic acid 31621-87-1, Polydioxanone
RL: DEV (Device component use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cartilage repair and regeneration scaffold and method)
IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate** 9050-30-0, Heparan sulfate 9056-36-4, Keratan sulfate **9067-32-7, Sodium hyaluronate** 24967-94-0, Dermatan sulfate
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lubricant; cartilage repair and regeneration scaffold and method)
IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate 9067-32-7, Sodium hyaluronate**
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lubricant; cartilage repair and regeneration scaffold and method)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

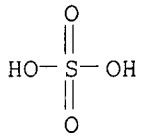
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L75 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:695831** HCAPLUS
DN **137:237785**
TI Porous beta-tricalcium phosphate granules for bone implantation, and methods for producing same
IN Dalal, Paresh S.; Dimaano, Godofredo R.; Toth, Carol Ann; Kulkarni, Shailesh C.
PA Stryker Corporation, USA
SO PCT Int. Appl., 151 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61L027-12
ICS A61L027-56
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 2, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002070029	A2	20020912	WO 2002-US5827	20020226
	WO 2002070029	A3	20030206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003049328	A1	20030313	US 2001-798518	20010302
PRAI	US 2001-798518	A	20010302		
	US 2001-960789	A	20010921		

AB A porous .beta.-tricalcium phosphate material for bone implantation is provided. The multiple pores in the porous TCP body are sep. discrete voids and are not interconnected. The pore size diam. is in the range of 20-500 .mu.m, preferably 50-125 .mu.m. The porous .beta.-TCP material provides a carrier matrix for bioactive agents and can form a moldable putty compn. upon the addn. of a binder. Preferably, the bioactive agent is encapsulated in a biodegradable agent. The invention provides a kit and an implant device comprising the porous .beta.-TCP, and a bioactive agent and a binder. The invention also provides an implementable prosthetic device comprising a prosthetic implant having a surface region, a porous .beta.-TCP material disposed on the surface region optionally comprising at least a bioactive agent or a binder. Methods of producing the porous .beta.-TCP material and including bone formation are also provided.
ST bone implant porous beta tricalcium phosphate granule sequence
IT Bone morphogenetic proteins

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(2; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(3; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(4; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(5; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(6; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(7; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Nucleic acids
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(BMP-encoding; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Carbohydrates, biological studies
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aldonic acids, polymer; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Transplant and Transplantation
(allotransplant; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Polyesters, biological studies
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(arom.; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Bone
Hip
(artificial; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Transplant and Transplantation
(autotransplant; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Polymers, biological studies
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Glues
(fibrin-contg.; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Drug delivery systems
(granules; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Drug delivery systems
Prosthetic materials and Prosthetics
(implants; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Putty
(medical; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Polyethers, biological studies
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ortho ester group-contg.; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Growth factors, animal
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(osteogenins; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Polyimides, biological studies
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyanhydride-; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Polyanhydrides
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyimide-; porous .beta.-tricalcium phosphate granules for bone implantation)
IT Binders
Encapsulation
Granulation
Mammalia
Molecular weight distribution
Particle size distribution
Porosity
Prosthetic materials and Prosthetics
Protein sequences
Sieving
Sintering
Sublimation
cDNA sequences
(porous .beta.-tricalcium phosphate granules for bone implantation)
IT **Gelatins**, biological studies
Glycosaminoglycans, biological studies
Mucins
Peptides, biological studies
Petrolatum
Polyamides, biological studies
Polyoxyalkylenes, biological studies
Polysaccharides, biological studies
Polyurethanes, biological studies
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)
IT Polyvinyl butyrals
RL: NUU (Other use, unclassified); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)
IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC

(Process); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT Interleukin 6
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT Collagens, biological studies
Polyanhydrides
Polyphosphazenes
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT Drug delivery systems
(powders; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Fats and Glyceridic oils, biological studies
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesame; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Drug delivery systems
(sustained-release; porous .beta.-tricalcium phosphate granules for bone implantation)

IT Transforming growth factors
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(.beta.-; porous .beta.-tricalcium phosphate granules for bone implantation)

IT 9001-78-9, Alkaline phosphatase
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(osteogenesis marker; porous .beta.-tricalcium phosphate granules for bone implantation)

IT 7758-87-4, .beta.-Tricalcium phosphate
RL: DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT 69-65-8, Mannitol 9004-54-0, Dextran, biological studies
9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethylcellulose 9004-65-3, Hydroxypropyl methylcellulose 9005-38-3, Sodium alginate **9007-28-7, Chondroitin sulfate** 9012-76-4, Chitosan 9032-42-2, Hydroxyethyl methylcellulose 9041-56-9, Hydroxybutyl methylcellulose 9050-04-8 **9067-32-7, Sodium hyaluronate** 9078-35-7 24991-23-9 25322-68-3, Polyethylene glycol 25513-46-6, Polyglutamic acid 26100-51-6, Polylactic acid 26124-68-5, Polyglycolic acid 34346-01-5 52352-27-9, Polyhydroxybutyric acid 78644-42-5, Polymalic acid 106392-12-5, Poloxamer
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT 9002-89-5, Polyvinyl alcohol 9003-39-8, Polyvinylpyrrolidone 9004-36-8, Cellulose acetate butyrate 9005-25-8, Starch, uses
RL: NUU (Other use, unclassified); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT 50-23-7, Hydrocortisone 50-28-2, Estradiol, biological studies 57-83-0, Progesterone, biological studies 302-79-4, Retinoic acid 1406-16-2, Vitamin d 9002-64-6, Pth 9002-72-6, Growth hormone 9004-10-8, Insulin, biological studies 62031-54-3, Fgf 67763-96-6, Igf-i

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT 9003-01-4D, Polyacrylic acid, derivs. 24937-78-8, Ethylene-vinyl acetate copolymer 24980-41-4, Poly(caprolactone) 25248-42-4, Poly(caprolactone) 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26063-00-3, Polyhydroxybutyrate 26161-42-2 26202-08-4, Polyglycolide 26680-10-4, Poly(D,L-lactide) 26744-04-7 26780-50-7, Polyglactin 29223-92-5, Poly(p-dioxanone) 31852-84-3, Poly(trimethylene carbonate) 33135-50-1, Poly(L-lactide) 41706-81-4, Poly(..epsilon..-caprolactone-glycolide) 50862-75-4, Poly(oxycarbonyloxy-1,3-propanediyl) 75734-93-9, Poly(glycolide-trimethylene carbonate) 129515-24-8, Poly(D,L-lactide-trimethylene carbonate)
RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

IT 458061-50-2
RL: PRP (Properties)
(unclaimed nucleotide sequence; porous beta-tricalcium phosphate granules for bone implantation, and methods for producing same)

IT 458061-41-1 458061-42-2 458061-43-3 458061-44-4 458061-45-5 458061-46-6 458061-47-7 458061-48-8 458061-49-9
RL: PRP (Properties)
(unclaimed protein sequence; porous beta-tricalcium phosphate granules for bone implantation, and methods for producing same)

IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate 9067-32-7, Sodium hyaluronate**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous .beta.-tricalcium phosphate granules for bone implantation)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

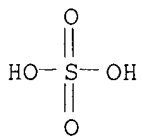
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L75 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:533183 HCAPLUS
DN 137:83679
TI Pharmaceutical compositions containing **viscoelastic** substances and chemical agents
IN Tanaka, Koichiro
PA Kobayakawa, Shinichiro, Japan; Shinoda, Takuya
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K045-08
ICS A61K009-08; A61K047-36; A61K047-38; A61P027-02; A61P029-00; A61P031-00
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002201143	A2	20020716	JP 2001-120001	20010418
US 2002183279	A1	20021205	US 2002-96715	20020313
PRAI JP 2000-360300	A	20001023		
JP 2001-120001	A	20010418		

AB The compns., useful for prevention of infection and/or inflammation in intraocular surgery or injection into joints, contain chem. agents (e.g., antiinflammatory agents and antimicrobial agents) and **viscoelastic** substances. A mixt. of **Healon** (**Na hyaluronate**) and 5 .mu.g/mL of Cravit (levofloxacin) significantly inhibited the growth of Bacillus subtilis.
ST **viscoelastic** pharmaceutical antiinflammatory antimicrobial intraocular surgery; joint injection **viscoelastic** pharmaceutical antimicrobial levofloxacin
IT Surgery
(intraocular; pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents for)
IT Anti-inflammatory agents
Antibacterial agents
Antibiotics
Antimicrobial agents
Viscoelastic materials
(pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)
IT Cataract
Eye
(surgery; pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents for)
IT 70458-96-7, Norfloxacin
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Noflo; pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)
IT **9067-32-7, Healon**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Opegan; pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)
IT 859-18-7, Lincomycin hydrochloride 82419-36-1, Ofloxacin 100986-85-4, Cravit
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)

IT **9004-61-9, Hyaluronic acid** 9004-65-3, Hydroxypropyl methyl cellulose **9007-28-7, Chondroitin sulfate 9082-07-9,** Sodium **chondroitin sulfate 123352-36-3,** Viscoat
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)

IT **9067-32-7, Healon**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Opegan; pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)

RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate 9082-07-9,** Sodium **chondroitin sulfate 123352-36-3,** Viscoat
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. **viscoelastic** substances and antiinflammatory and/or antimicrobial agents)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

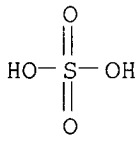
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9082-07-9 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

CM 1

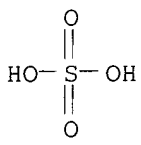
CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

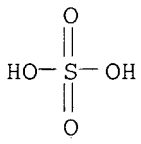
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:429542** HCAPLUS
DN **137:11003**
TI Chondroprotective/restorative compositions containing **hyaluronic acid**
IN Pierce, Scott W.
PA USA
SO U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-715
ICS A61K031-70
NCL 514054000

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002068718	A1	20020606	US 2001-967977	20011002
PRAI	US 2000-237838P	P	20001003		

AB An oral compn. based on **hyaluronic acid** or its salts and optionally a therapeutic drug is provided for treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post-operative arthroscopic surgery, deterioration of proper joint function including joint mobility, the redn. or inhibition of metabolic activity of chondrocytes, the activity of enzymes that degrade cartilage, and the redn. or inhibition of the prodn. of **hyaluronic acid** in a mammal. Addnl., compns. contg. **hyaluronic acid, chondroitin sulfate** and glucosamine **sulfate** in a paste formulation are also described which can be administered on their own or can be used as a feed additive for cats and dogs. For example, a compn. contained (by wt.) glucosamine **sulfate** 36%, **chondroitin sulfate** 4%, **sodium hyaluronate** 0.144%, manganese **sulfate** 0.144%, ibuprofen 200 mg, powd. sugar 20%, glycerin 0.7%, xanthan gum 0.2%, sodium benzoate 0.7%, citric acid 0.2%, molasses 23.5%, and water 14.4%.

ST oral **hyaluronic acid** chondrocyte cartilage joint disorder; antiarthritic oral **hyaluronic acid** chondrocyte cartilage

IT Balsams
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Peru; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Natural products, pharmaceutical
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aloe; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Caseins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(calcium complexes; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Drug delivery systems
(capsules; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Natural products, pharmaceutical
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cascara sagrada; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Analgesics
Anti-inflammatory agents
Antiarthritics
Cat (Felis catus)
Dog (Canis familiaris)
Feed additives
Horse (Equus caballus)
Mammalia
Molasses
Nutrients
Witch hazel
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Amino acids, biological studies
Castor oil
Cocoa butter
Cod liver oil

Hydrocarbon oils
Kaolin, biological studies
Lanolin
Lecithins
Mineral elements, biological studies
Sulfonamides
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **Cartilage**
(degrdn. of; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **Joint, anatomical**
(**disease**, effusion; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Leg
(disease, lameness; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Drug delivery systems
(**gels**; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Natural products, pharmaceutical
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ipecac; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Drug delivery systems
(oral; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Drug delivery systems
(pastes; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peppermint; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd., n-3; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Surgery
(post-operative arthroscopic surgery; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **Chondrocyte**
(redn. or inhibition of metabolic activity of; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesame; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(shark-liver oil; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **Synovial membrane**
(synovitis; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **9004-61-9, Hyaluronic acid 9007-28-7**
, Chondroitin sulfate 9067-32-7,
Sodium hyaluronate 29031-19-4, Glucosamine sulfate

RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT 50-02-2 50-03-3, Hydrocortisone acetate 50-06-6, Phenobarbital, biological studies 50-13-5, Meperidine hydrochloride 50-21-5, Lactic acid, biological studies 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-33-9, Phenylbutazone, biological studies 50-78-2, Acetylsalicylic acid 50-78-2D, Acetylsalicylic acid, buffered 50-81-7, L-Ascorbic acid, biological studies 51-42-3, Epinephrine bitartrate 51-98-9, Norethindrone acetate 52-28-8, Codeine phosphate 53-03-2, Prednisone 53-86-1, Indomethacin 54-11-5, Nicotine 54-31-9, Furosemide 55-63-0, Nitroglycerin 56-75-7, Chloramphenicol 56-81-5, Glycerin, biological studies 57-11-4, Stearic acid, biological studies 57-27-2, Morphine, biological studies 57-33-0, Pentobarbital sodium 57-41-0, Phenytoin 57-55-6, Propylene glycol, biological studies 57-63-6, Ethinyl estradiol 58-08-2, Caffeine, biological studies 58-55-9, Theophylline, biological studies 58-85-5, Biotin 58-93-5, Hydrochlorothiazide 59-30-3, Folic acid, biological studies 59-43-8, Thiamine, biological studies 59-67-6, Niacin, biological studies 61-33-6, biological studies 61-68-7, Mefenamic acid 61-76-7, Phenylephrine hydrochloride 62-49-7, Choline 64-17-5, Ethanol, biological studies 64-19-7, Acetic acid, biological studies 64-75-5, Tetracycline hydrochloride 65-23-6, Pyridoxine 65-85-0, Benzoic acid, biological studies 67-63-0, Isopropanol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 67-71-0, Methylsulfonylmethane 68-04-2, Sodium citrate 68-19-9, Cyanocobalamin 68-22-4, Norethindrone 69-53-4, Ampicillin 69-72-7, Salicylic acid, biological studies 71-58-9, Medroxyprogesterone acetate 73-78-9, Lidocaine hydrochloride 76-22-2, Camphor 76-49-3, Bornyl acetate 76-57-3, Codeine 77-09-8, Phenolphthalein 77-41-8, Methsuximide 77-92-9, Citric acid, biological studies 78-11-5, Pentaerythritol tetranitrate 79-83-4 83-88-5, Riboflavin, biological studies 85-79-0, Dibucaine 87-67-2, Choline bitartrate, biological studies 87-89-8, myo-Inositol 88-04-0, Chloroxylenol 89-78-1, Menthol 90-64-2 93-14-1, Guaifenesin 93-60-7, Methyl nicotinate 94-09-7, Benzocaine 94-36-0, Benzoyl peroxide, biological studies 97-59-6, Allantoin 98-92-0, Niacinamide 100-97-0, Methenamine, biological studies 103-90-2, Acetaminophen 104-46-1, Anethole 108-46-3, Resorcinol, biological studies 108-95-2, Phenol, biological studies 112-38-9, Undecylenic acid 113-92-8, Chlorpheniramine maleate 114-07-8, Erythromycin 115-67-3, Paramethadione 117-10-2, Danthron 119-36-8, Methyl salicylate 119-61-9D, Benzophenone, derivs. 123-03-5, Cetylpyridinium chloride 124-94-7, Triamcinolone 125-69-9, Dextromethorphan hydrobromide 126-07-8, Griseofulvin 128-49-4, Docusate calcium 131-53-3, Dioxybenzone 131-57-7, Oxybenzone 132-20-7, Pheniramine maleate 134-31-6, 8-Hydroxyquinoline sulfate 136-77-6, Hexylresorcinol 137-58-6, Lidocaine 139-12-8, Aluminum acetate 140-65-8, Pramoxine 141-01-5, Ferrous fumarate 143-71-5, Hydrocodone bitartrate 144-55-8, Sodium bicarbonate, biological studies 147-24-0, Diphenhydramine hydrochloride 150-13-0, p-Aminobenzoic acid 152-11-4, Verapamil hydrochloride 152-43-2, Quinestrol 154-41-6, Phenylpropanolamine hydrochloride 156-51-4, Phenelzine sulfate 299-29-6, Ferrous gluconate 299-42-3, Ephedrine 302-79-4, Tretinoin 303-25-3, Cyclizine hydrochloride 318-98-9, Propranolol hydrochloride 321-64-2, Tacrine 345-78-8, Pseudoephedrine hydrochloride 395-28-8 439-14-5, Diazepam 443-48-1, Metronidazole 469-62-5, Propoxyphene 470-82-6, Eucalyptol 471-34-1, Calcium carbonate, biological studies 532-03-6, Methocarbamol 532-32-1, Sodium benzoate 546-93-0, Magnesium carbonate 550-70-9, Triprolidine hydrochloride 557-04-0, Magnesium stearate 557-08-4, Zinc undecylenate 562-10-7 577-11-7, Docusate sodium 603-50-9, Bisacodyl 614-39-1, Procainamide hydrochloride 637-07-0, Clofibrate 637-58-1, Pramoxine hydrochloride 644-62-2, Meclofenamic acid 723-46-6, Sulfamethoxazole 980-71-2,

Bromopheniramine maleate 1218-35-5, Xylometazoline hydrochloride 1305-62-0, Calcium hydroxide, biological studies 1309-42-8, Magnesium hydroxide 1321-11-5, Aminobenzoic acid 1327-41-9, Aluminum chlorohydrate 1400-61-9, Nystatin 1403-66-3, Gentamicin 1404-90-6, Vancomycin 1405-10-3, Neomycin sulfate 1405-20-5, Polymyxin B sulfate 1405-41-0, Gentamycin sulfate 1405-87-4, Bacitracin 1406-16-2, Vitamin D 1406-18-4, Vitamin E 1639-60-7, Propoxyphene hydrochloride 1684-40-8, Tacrine hydrochloride 2391-03-9, Dexbrompheniramine maleate 2398-96-1, Tolnaftate 2955-38-6, Prazepam 3380-34-5, Triclosan 4205-90-7, Clonidine 4205-91-8, Clonidine hydrochloride 4499-40-5, Oxtriphylline, biological studies 5466-77-3, Octyl methoxycinnamate 5534-09-8, Beclomethasone dipropionate 5874-97-5, Metaproterenol sulfate 6385-02-0, Meclofenamate sodium 6740-88-1, Ketamine 7054-25-3, Quinidine gluconate 7280-37-7, Estropipate 7439-89-6, Iron, biological studies 7439-96-5, Manganese, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7447-40-7, Potassium chloride, biological studies 7460-12-0, Pseudoephedrine sulfate 7491-09-0, Docusate potassium 7553-56-2, Iodine, biological studies 7631-86-9, Silicon dioxide, biological studies 7647-14-5, Sodium chloride (NaCl), biological studies 7681-49-4, Sodium fluoride, biological studies 7704-34-9, Sulfur, biological studies 7720-78-7, Ferrous sulfate 7723-14-0, Phosphorus, biological studies 7733-02-0, Zinc sulfate 7757-79-1, Potassium nitrate, biological studies 7785-87-7, Manganese sulfate 8011-96-9, Calamine 8025-63-6 8050-81-5, Simethicone 8065-29-0, Liotrix 9004-10-8, Insulin, biological studies 9004-32-4, Sodium carboxymethyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9006-65-9, Dimethicone 9036-19-5, Octoxynol 10163-15-2, Sodium monofluorophosphate 11041-12-6, Cholestyramine resin 11096-26-7, Erythropoietin 11099-07-3, Glyceryl stearate 11103-57-4, Vitamin A 11111-12-9D, Cephalosporin, derivs. 11138-66-2, Xanthan gum 12001-76-2, Vitamin B 12001-79-5, Vitamin K 14362-31-3, Chlorcyclizine hydrochloride 14455-29-9, Aluminum carbonate 14663-23-1, Dantrium 14698-29-4, Oxolinic acid 14838-15-4, Phenylpropanolamine 14987-04-3, Magnesium trisilicate 15307-79-6, Diclofenac sodium 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 17140-78-2, Propoxyphene napsylate 18472-51-0, Chlorhexidine gluconate 18559-94-9, Albuterol 18917-89-0, Magnesium salicylate 20830-75-5, Digoxin 21245-02-3, Padimate O 21645-51-2, Aluminum hydroxide, biological studies 21829-25-4, Nifedipine 22204-53-1, Naproxen 22832-87-7, Miconazole nitrate 22839-47-0, Aspartame 24390-14-5, Doxycycline hyclate 25441-16-1 25812-30-0, Gemfibrozil 26027-38-3, Nonoxynol-9 26159-34-2, Naproxen sodium 26171-23-3, Tolmetin 26787-78-0, Amoxicillin 26921-17-5, Timolol maleate 28911-01-5, Triazolam 28981-97-7, Alprozolam 29094-61-9, Glipizide 29122-68-7, Atenolol 29984-33-6, Vidarabine phosphate 34552-84-6, Isoxicam 34580-13-7, Ketotifen
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT 36322-90-4, Piroxicam 36505-84-7, Buspirone 36653-82-4, Cetyl alcohol 37148-27-9, Clenbuterol 38304-91-5, Minoxidil 42399-41-7, Diltiazem 42461-84-7, Flunixin Meglumine 50370-12-2, Cefadroxil 50679-08-8, Terfenadine 51022-70-9, Albuterol sulfate 51264-14-3, Amsacrine 52128-35-5, Trimetrexate 52618-67-4, Tioperidone 53910-25-1, Pentostatin 53994-73-3, Cefaclor 56296-78-7, Fluoxetine hydrochloride 56392-17-7, Metoprolol tartrate 59729-33-8, Citalopram 60142-96-3, Gabapentin 62571-86-2, Captopril 66357-35-5, Ranitidine 68252-19-7, Pirmenol 68497-62-1, Pramiracetam 69198-10-3, Metronidazole hydrochloride 70059-30-2, Cimetidine hydrochloride 72332-33-3, Procaterol 73590-58-6, Omeprazole 74011-58-8, Enoxacin 75330-75-5, Lovastatin 75847-73-3, Enalapril 76547-98-3, Lisinopril 80841-47-0, Amsalog 85441-61-8, Quinapril 88637-37-0, Diphenhydramine citrate 89197-32-0, Efaroxan 93107-08-5, Ciprofloxacin hydrochloride

93390-81-9, Fosphenytoin 93738-40-0, Ralitoline 96328-17-5, 2'-Chloropentostatin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT 9004-34-6, Cellulose, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcryst.; chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate 9067-32-7, Sodium hyaluronate**
RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. contg. **hyaluronic acid** for treatment of joint disorders)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

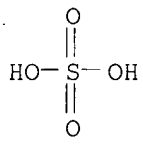
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L75 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 2000:869032 HCAPLUS
DN 135:55996
TI Healon5 versus Viscoat during cataract surgery: Intraocular pressure, laser flare and corneal changes
AU Schwenn, Oliver; Dick, H. Burkhard; Krummenauer, Frank; Christmann, Stefan; Vogel, Annette; Pfeiffer, Norbert
CS Department of Ophthalmology, Johannes Gutenberg University, Mainz, 55131, Germany
SO Graefe's Archive for Clinical and Experimental Ophthalmology (2000), 238(10), 861-867
CODEN: GACODL; ISSN: 0721-832X
PB Springer-Verlag
DT Journal

LA English
CC 1-12 (Pharmacology)
AB The use of a viscoelastic substance facilitates cataract surgery. **Healon** 5 is a new viscoelastic product with special rheol. properties. We evaluated the postoperative effect of Viscoat and Healon5 on intraocular pressure (IOP), central corneal thickness (CCT), endothelial cell counts and laser flare. Forty-eight eyes of 48 patients undergoing routine phacoemulsification followed by foldable IOL implantation were enrolled. Either Healon5 or Viscoat was used according to a block-randomization scheme. The aspiration technique was standardized. IOP, CCT, endothelial cell counts and laser flare were compared pre-and postoperatively. Statistical anal. was performed using the two-sample Wilcoxon test. Data description was based on median and quartiles, while graphic description was performed by non-parametric box plots. Viscoat demonstrated a statistically significant higher IOP than Healon5 at 4 and 8 h postoperatively ($P<0.01$ and <0.05, resp.). Further, the laser flare values were statistically significantly higher for the Viscoat than for the Healon5 group 8 h postoperatively ($P<0.05$). Endothelial cell loss did not differ significantly between the two groups (relative change in endothelial cell d. after 3 mo: -4.3% for the Healon5 group and -6.2% for Viscoat group). There was neither a statistically nor a clin. significant difference in endothelial cell loss after the use of Healon5 or Viscoat in routine cataract surgery. However, the IOP in the early postoperative period was higher in the Viscoat group than in the Healon5 group.
ST Healon5 Viscoat cataract surgery laser flare cornea; intraocular pressure antiglaucoma **Healon** cataract surgery
IT Antiglaucoma agents
(Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT Surgery
(cataract; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT Eye
(cornea; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT Laser radiation
(flare; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT Cataract
(surgery; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT **9067-32-7, Healon**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(5; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
IT **123352-36-3**, Viscoat
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(3) Arshinoff, S; Ophthalmic Pract 1995, V13, P98
(4) Arshinoff, S; Ophthalmic Practice 1998, V16, P24
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(9) Gross, J; Am J Ophthalmol 1988, V105, P466 MEDLINE
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(11) Hayreh, S; Arch Opthalmol 1980, V98, P1410 MEDLINE
(12) Irvine, A; Arch Ophthalmol 1978, V96, P1023 MEDLINE
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(17) Olivius, E; J Am Intraocul Implant Soc 1985, V11, P480 MEDLINE
(18) Probst, L; J Cataract Refract Surg 1994, V20, P145 MEDLINE
(19) Rainer, G; J Cataract Refract Surg 2000, V26, P271 MEDLINE
(20) Ravalico, G; J Cataract Refract Surg 1997, V23, P433 MEDLINE
(21) Savage, J; Ophthalmology 1985, V92, P1506 MEDLINE
(22) Schubert, H; Exp Eye Res 1984, V39, P137 HCAPLUS
(23) Solomon, K; ASCRS Symposium on Cataract, IOL and Refractive Surgery. Book of abstracts 1999, V134
(24) Tetz, M; ASCRS Symposium on Cataract, IOL and Refractive Surgery. Book of abstracts 1999, V7
(25) Vogel, A; ASCRS Symposium on Cataract and Refractive Surgery. Book of abstracts 1999, V134

IT **9067-32-7, Healon**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(5; Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **123352-36-3**, Viscoat
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Healon5 vs. Viscoat during cataract surgery in humans and intraocular pressure, laser flare and corneal changes)
RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

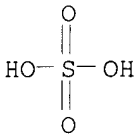
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:529038 HCAPLUS
DN 131:139516
TI Use of hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure
IN Refojo, Miguel F.; Harooni, Mark; Freilich, Jonathan M.; Abelson, Mark B.
PA The Schepens Eye Research Institute, Inc., USA
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K038-46
ICS C12N009-26; A01N043-04
CC 1-12 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9940933	A1	19990819	WO 1999-US3125	19990212
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9926772	A1	19990830	AU 1999-26772	19990212
PRAI	US 1998-74837P	P	19980217		
	WO 1999-US3125	W	19990212		

AB Small doses, less than 15 IU and preferably less than 10 IU per treated eye, of hyaluronidase can safely and effectively be employed to reduce postoperative intraocular pressure caused by residual amts. of **hyaluronan** used during anterior segment surgical procedures. The hyaluronidase may be administered after surgery, or at 5 IU or less per treated eye concomitantly. Hyaluronidase treatment may be combined with treatments with other medications.
ST hyaluronidase eye surgery intraocular pressure viscoelastic; **hyaluronan** eye surgery intraocular pressure hyaluronidase
IT Eye
Surgery
Viscoelastic materials
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
IT Antiglaucoma agents
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure, and use with other agents)
IT Drug delivery systems
(infusions; hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
IT Drug delivery systems
(injections; hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)

IT Drug delivery systems
(ophthalmic; hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
IT **9004-61-9, Hyaluronan 9067-32-7, Sodium hyaluronate 123352-36-3**, Viscoat
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
IT 9001-54-1, Hyaluronidase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
IT 51-84-3, Acetylcholine, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure, and use with other agents)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Calder; British Journal of Opthalmology 1986, V70(6), P418 MEDLINE
(2) Equi; Journal of Ocular Pharmacology and Therapeutics 1997, V13(4), P289 HCAPLUS
(3) Lang; Arch Opthalmol 1984, V102(7), P1079 HCAPLUS
(4) Rankova; Documenta Ophthalmologica 1992, V80(6), P381
IT **9004-61-9, Hyaluronan 9067-32-7, Sodium hyaluronate 123352-36-3**, Viscoat
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hyaluronidase to reduce viscoelastic-related post-operative increases in intraocular pressure)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

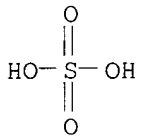
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:646491 HCAPLUS
DN 130:32985
TI Efficacy of hyaluronidase in reducing increases in intraocular pressure related to the use of viscoelastic substances
AU Harooni, Mark; Freilich, Jonathan M.; Abelson, Mark; Refojo, Miguel
CS Schepens Eye Research Institute, Harvard Medical School, Boston, MA, USA
SO Archives of Ophthalmology (Chicago) (1998), 116(9), 1218-1221
CODEN: AROPAW; ISSN: 0003-9950
PB American Medical Association
DT Journal
LA English
CC 1-12 (Pharmacology)
AB To evaluate the efficacy of hyaluronidase in preventing increases in intraocular pressure related to injections of **hyaluronan**-contg. viscoelastic substances, 25 white rabbits were divided into 5 groups. In groups 1 through 4, 0.15 mL of aq. humor was removed and replaced with 0.10 mL of a viscoelastic substance in both eyes. Addnl., 10 units of hyaluronidase (0.05 mL) was injected in the anterior chamber of the right eye, whereas the left eye was injected with a volumetrically equiv. dose of balanced saline soln. Viscoelastic substances tested were **Healon** and **Healon** GV (Pharmacia & Upjohn, Kalamazoo, Mich), Viscoat (Alcon Labs., Fort Worth, Tex), and Ocucoat (Storz Ophthalmics, Clearwater, Fla). In group 5, right eyes were injected with 10 units of hyaluronidase and the left eyes were treated with balanced saline soln. After injections of viscoelastic substance, intraocular pressure rose rapidly, reaching a peak at approx. 46 h after injection and returning to preinjection levels within 24 h. Hyaluronidase significantly decreased intraocular pressure when used with **Healon**, **Healon** GV, and Viscoat, but not with Ocucoat. When injected in the absence of viscoelastic, hyaluronidase appeared to decrease intraocular pressure, but this result was not statistically significant. Injections of hyaluronidase into the anterior chamber of rabbits effectively prevent increases in intraocular pressure induced by **hyaluronan**-contg. viscoelastic substances. This effect may be related to the ability of hyaluronidase to cleave **hyaluronan** moieties.
ST hyaluronidase viscoelastic **hyaluronan** intraocular pressure
IT Eye
(intraocular pressure; efficacy of hyaluronidase in reducing increases in intraocular pressure related to the use of viscoelastic substances)
IT **9004-61-9, Hyaluronan** 9004-65-3 **9067-32-7**, **Healon** (polysaccharide) **123352-36-3**, Viscoat

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(efficacy of hyaluronidase in reducing increases in intraocular pressure related to the use of viscoelastic substances)

IT 9001-54-1, Wydase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(efficacy of hyaluronidase in reducing increases in intraocular pressure related to the use of viscoelastic substances)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(4) Calder, I; Br J Ophthalmol 1986, V70, P418 MEDLINE
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(10) Hutz, V; J Cataract Refract Surg 1996, V22, P955
(11) Mac Rae, S; Am J Ophthalmol 1983, V95, P332 HCAPLUS
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(14) Roberts, B; J Cataract Refract Surg 1989, V15, P321 MEDLINE
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(16) Stankiewicz, A; Klin Oczna 1974, V14, P1005 MEDLINE

IT **9004-61-9, Hyaluronan 9067-32-7,**
Healon (polysaccharide) **123352-36-3,** Viscoat
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(efficacy of hyaluronidase in reducing increases in intraocular pressure related to the use of viscoelastic substances)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

CM 3

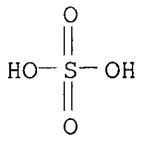
CRN 9007-27-6
CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1997:344803 HCAPLUS
DN 127:824
TI Methods and means for control of proliferation of remnant epithelial cells following ocular or other surgery
IN Gwon, Arlene E.; Hagemeier, Charles J.
PA Gwon; Arlene E., USA; Hagemeier; Charles J.
SO U.S., 9 pp., Cont. of U.S. Ser. No. 463,390, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-70
NCL 514054000
CC 1-12 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5627162	A	19970506	US 1995-374360	19950118
PRAI US 1990-463390		19900111		

AB Methods are disclosed for control of undesired cell proliferation of remnant cells following ocular or other surgery, by applying an effective amt. of at least one proteoglycan-type substrate adhesion mol. (SAM) to the site of surgery. SAMs, in particular **chondroitin sulfate**, **hyaluronic acid**, and non-toxic, pharmaceutically acceptable salts thereof, alone or in a compn. form, are typically used to prevent or inhibit growth of lens-related cells in a lens capsule after surgical removal of the lens, or to prevent proliferative vitreoretinopathy following retinal reattachment procedure performed with or without vitrectomy.
ST surgery epithelial cell proliferation inhibition; proteoglycan substrate adhesion mol antiproliferative surgery; eye surgery epithelial cell proliferation inhibition
IT **Gelatins**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CM-cellulose delivery vehicle combined with; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)
IT **Eye**
(lens, capsule; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)
IT **Eye**
(lens; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)
IT Proliferation inhibition

(proliferation inhibitors; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT Cataract
Epithelium
Intraocular lenses
Surgery
(proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT Fibronectins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **Eye**, disease
Eye, disease
(retina, detachment; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **Eye**, disease
(retinopathy, proliferative vitreoretinopathy; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **Eye**
Eye
(vitrectomy; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **9067-32-7, Healon**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**Healon**; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **123352-36-3**, Viscoat
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Viscoat; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT 9003-01-4, Polyacrylic acid 9004-32-4 9004-65-3, Hydroxypropyl methyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(delivery vehicle; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **9004-61-9, Hyaluronic acid 9007-28-7**
, Chondroitin sulfate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

IT **9067-32-7, Healon**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**Healon**; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)

RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **123352-36-3**, Viscoat
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Viscoat; proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)
RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

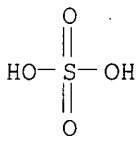
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



IT **9004-61-9, Hyaluronic acid 9007-28-7**
, Chondroitin sulfate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proteoglycan-type substrate adhesion mol. for remnant epithelial cell proliferation control following ocular or other surgery)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

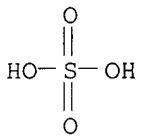
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **1996:483063** HCAPLUS
DN **125:308797**
TI Compatibility and viscosity of **sodium hyaluronate** and sodium **chondroitin sulfate** in the Viscoat formulation
AU Doshi, Uday; Gan, Owen; Jani, Rajni; Rhone, Erin
CS Formulation Development Department, **Alcon** Laboratories, Fort Worth, TX, 76134, USA
SO Yakuzaigaku (1996), 56(2), 70-77
CODEN: YAKUA2; ISSN: 0372-7629
PB Nippon Yakuzai Gakkai
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
AB A combination of **sodium hyaluronate** (HA) and sodium **chondroitin sulfate** (CDS) has been detd. to be particularly well suited as a surgical aid during opthalmic surgery. The objective of these studies was to find the amt. of HA required for a specific viscosity for Viscoat **viscoelastic** soln., and to det. the amt. of CDS that could be combined with HA to yield a homogenous product. First a series of formulations contg. a const. 4% of CDS, and various concns. of HA were measured for viscosity. Data showed that optimum viscosity was obtained for the formulation contg. 3% HA. In the second series, HA was held to a const. 3%, and the CDS concn. varied. These data showed HA and CDS were not homogeneous when the CDS concn. was equal to or greater than 1.67 times the HA concn. Solns. contg. 4% CDS in combination with 3% HA (the concns. found in Viscoat) formed a miscible soln. From these optimization studies, 3% HA and 4% CDS were detd. to be the optimal concns. to obtain the most utilitarian viscosity for Viscoat **viscoelastic** soln.
ST **hyaluronate** chondroitin compatibility viscosity Viscoat soln
IT Viscosity
(compatibility and viscosity of **sodium hyaluronate** and sodium **chondroitin sulfate** in Viscoat soln. for opthalmic surgery)
IT Pharmaceutical dosage forms
(solns., **viscoelastic**; compatibility and viscosity of **sodium hyaluronate** and sodium **chondroitin sulfate** in Viscoat soln. for opthalmic surgery)
IT **9067-32-7, Sodium hyaluronate**
9082-07-9, Sodium **chondroitin sulfate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compatibility and viscosity of **sodium hyaluronate** and sodium **chondroitin sulfate** in Viscoat soln. for opthalmic surgery)

IT **9067-32-7, Sodium hyaluronate**
9082-07-9, Sodium **chondroitin sulfate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compatibility and viscosity of **sodium hyaluronate** and sodium **chondroitin sulfate** in Viscoat soln. for opthalmic surgery)

RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9082-07-9 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

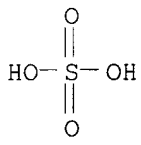
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:546939 HCAPLUS
DN 122:274105
TI Surface-active viscoelastic **hyaluronic acid** solutions for ocular use
IN Benedetto, Dominick A.
PA Escalon Ophthalmics, Inc., USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-70
ICS A61F013-20; G02C007-02
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9507085	A1	19950316	WO 1994-US10175	19940907

W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1993-116908 19930907
AB A modified mucopolysaccharide soln. for use as a biol. active therapeutic infusion comprises a pharmaceutical-grade viscoelastic fraction selected from a C3-20 acyl-substituted **hyaluronic acid** and

mixts. thereof with **hyaluronic acid**, and hydroxypropylmethylcellulose. These solns. have a surface tension of 40-65 dynes/cm2; the viscoelastic fraction preferably has an av. mol. wt. .gtoreq.50,000. In some embodiments a physiol. buffer fraction is present. The soln. is injected intraocularly to protect internal ocular structures during ocular surgery and to retard aspiration of material from the ocular surgery site. The soln. also can protect internal ocular structures such as corneal endothelium from accidental contact with surgical instruments. Thus, solns. of 2 **hyaluronic acid** fractions from rooster comb (1 .times. 106 Da at 5 mg/mL and 5 .times. 105 Da at 30 mg/mL) were mixed at a vol. ratio of 2:1. The viscous mixt. easily fractured when suctioned through a 0.3-mm aspiration cannula at a vacuum pressure of 50-200 mm Hg.

ST **hyaluronate** viscoelastic soln ocular pharmaceutical

IT Surgery
(ocular; surface-active viscoelastic **hyaluronic acid** solns. for ocular use)

IT Viscoelastic materials
(surface-active viscoelastic **hyaluronic acid** solns. for ocular use)

IT Pharmaceutical dosage forms
(injections, ophthalmic, surface-active viscoelastic **hyaluronic acid** solns. for ocular use)

IT **9004-61-9, Hyaluronic acid 9004-61-9D**
, Hyaluronic acid, esters, fatty 9004-65-3,
Hydroxypropylmethylcellulose **9067-32-7** 108174-56-7, Amvisc
123352-36-3, Viscoat
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(surface-active viscoelastic **hyaluronic acid** solns. for ocular use)

IT **9004-61-9, Hyaluronic acid 9004-61-9D**
, Hyaluronic acid, esters, fatty **9067-32-7**
123352-36-3, Viscoat
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(surface-active viscoelastic **hyaluronic acid** solns. for ocular use)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9

CMF H2 O4 S . x Na . x Unspecified

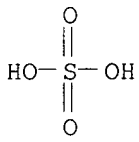
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **1994:144233** HCAPLUS
DN **120:144233**
TI Combinations of **viscoelastics** for use during surgery
IN McLaughlin, Richard N.; Lorenzetti, Ole J.
PA **Alcon Surgical, Inc., USA**
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-00
CC 63-7 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9325187	A1	19931223	WO 1993-US5639	19930611
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9345347	A1	19940104	AU 1993-45347	19930611
	EP 705095	A1	19960410	EP 1993-915325	19930611
	EP 705095	B1	19971126		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AT 160504	E	19971215	AT 1993-915325	19930611
	ES 2110103	T3	19980201	ES 1993-915325	19930611
PRAI	US 1992-897733		19920612		
	WO 1993-US5639		19930611		

AB Systems for performing surgery, esp. ophthalmic surgery, utilizing multiple **viscoelastic** agents with differing physicochem. properties are disclosed. The systems enable the skilled surgeon to perform certain steps of a surgical procedure with **viscoelastic** agents that are particularly well suited for such steps. A 1st **viscoelastic** agent has greater adherent properties than a 2nd **viscoelastic** agent which has greater cohesive properties than the 1st agent. Preferably, the 1st agent comprises a combination of **Na hyaluronate** (av. <1000 kDa) .apprx.3 and **chondroitin sulfate** (.apprx.25 kDa) .apprx.4 wt./vol.% and the 2nd agent is **Na hyaluronate** (av. > 2000 kDa) at 1.0 wt./vol.%. The **viscoelastic** agents are useful in conducting cataract surgery.

ST **viscoelastic** material combination eye surgery;
hyaluronate chondroitin sulfate combination
cataract surgery
IT Collagens, biological studies
RL: BIOL (Biological study)
(in system contg. multiple **viscoelastic** agents, for surgery)
IT **Eye**, disease
(surgery, system contg. adhesive first **viscoelastic** agent and
cohesive second **viscoelastic** material for)
IT **Viscoelastic** materials
(system contg. adhesive first and cohesive second, for surgery)
IT Surgery
(system contg. adhesive first **viscoelastic** agent and cohesive
second **viscoelastic** material for)
IT Cataract
(system contg. adhesive first **viscoelastic** agent and cohesive
second **viscoelastic** material for surgery of)
IT Cohesion
(system contg. **viscoelastic** agents having properties of
adhesion and, for surgery)
IT Adhesion
(system contg. **viscoelastic** agents having properties of
cohesion and, for surgery)
IT 9003-05-8, Polyacrylamide 9003-39-8, Polyvinylpyrrolidone 9004-32-4,
Carboxymethylcellulose 9004-57-3, Ethylcellulose 9004-65-3,
Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose
9007-28-7, Chondroitin sulfate
9067-32-7, Sodium hyaluronate 69992-87-6,
Keratan **153311-76-3**
RL: BIOL (Biological study)
(in system contg. multiple **viscoelastic** agents, for surgery)
IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
153311-76-3
RL: BIOL (Biological study)
(in system contg. multiple **viscoelastic** agents, for surgery)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

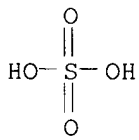
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 153311-76-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9007-28-7
CMF H2 O4 S . x Unspecified

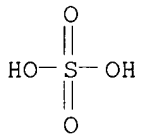
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **1991:457253** HCAPLUS
DN **115:57253**
TI Preparation of water-insoluble derivatives of **hyaluronic acid** as surgical aids and drug delivery systems
IN Burns, James W.; Cox, Steven; Walts, Alan E.
PA Genzyme Corp., USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K047-26
ICS C08L001-00
NCL 106162000
CC 63-7 (Pharmaceuticals)
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5017229	A	19910521	US 1990-543163	19900625
	WO 9200105	A1	19920109	WO 1991-US4543	19910625
	W: AU, FI, JP, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9183924	A1	19920123	AU 1991-83924	19910625

	AU 660282	B2	19950622		
	EP 537292	A1	19930421	EP 1991-914691	19910625
	EP 537292	B1	19970409		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05508161	T2	19931118	JP 1991-514243	19910625
	AT 151294	E	19970415	AT 1991-914691	19910625
	ES 2100954	T3	19970701	ES 1991-914691	19910625
	US 6174999	B1	20010116	US 1992-833973	19920211
	NO 9204875	A	19921216	NO 1992-4875	19921216
	US 5527893	A	19960618	US 1992-997298	19921223
	US 5760200	A	19980602	US 1995-377949	19950125
	US 6030958	A	20000229	US 1997-914320	19970818
	US 6235726	B1	20010522	US 1999-376266	19990818
	US 2001039336	A1	20011108	US 2001-757202	20010109
PRAI	US 1987-100104	A2	19870918		
	US 1990-543163	A	19900625		
	US 1991-703254	A2	19910520		
	WO 1991-US4543	A	19910625		
	US 1992-833973	A3	19920211		
	US 1994-176334	B1	19940103		
	US 1994-326058	A1	19941019		
	US 1997-914320	A3	19970818		

AB A biocompatible **gel** is prepd. by reacting **hyaluronic acid** (I), a polyanionic polysaccharide, and an activating agent under conditions sufficient to form the **gel**. The polysaccharide is chosen from the group consisting of CM-cellulose, carboxymethyl amylose, **chondroitin**-6-**sulfate**, dermatan **sulfate**, heparin and heparin **sulfate**. The **gels** prevent adhesions or accretions of body tissues during a post-operation or healing period. The **gels** may also include a pharmaceutically active substance. Thus, to 100 mL of an aq. soln. (pH 4.7-4.8) contg. I 0.4% and CNM cellulose 0.19% was added 0.67 g of 1-(3-dimethylaminopropyl)-3-ethyl-carbodiimide and the reaction allowed to proceed for 1 h. After removal of the ppt. by dialysis against acidified water for 24 h, the slurry was cast into flat molds and air-dried for 24 h at room temp. The membranes were shown to reduce the incidence of postoperative adhesion formation in exptl. animal models.

ST **hyaluronate gel** surgical aid; polysaccharide modified **hyaluronate** tissue adhesive; matrix drug **hyaluronate gel**

IT Pharmaceutical dosage forms
(matrix for, polysaccharide-modified **hyaluronate gels** for)

IT Medical goods
(polysaccharide-modified **hyaluronate gels** for, in prevention of postoperative tissue adhesion)

IT Animal tissue
(postoperative adhesion prevention of, polysaccharide-modified **hyaluronate gels** for)

IT Polysaccharides, compounds
RL: BIOL (Biological study)
(reaction products, with activated **hyaluronates**, for surgical aids and drug delivery matrixes)

IT 687-64-9DP, L-Lysine methyl ester, reaction products with **hyaluronate** and carbodiimides 1892-57-5DP, reaction products with **hyaluronate** and polysaccharides 2133-40-6DP, L-Proline methyl ester hydrochloride, reaction products with **hyaluronate** and carbodiimides 2743-40-0DP, L-Leucine ethyl ester hydrochloride, reaction products with **hyaluronate** and carbodiimides 2748-02-9DP, L-Leucine-tert-butyl ester hydrochloride, reaction products with **hyaluronate** and carbodiimides 6306-52-1DP, L-Valine methyl ester hydrochloride, reaction products with **hyaluronate** and carbodiimides 7517-19-3DP, L-Leucine methyl ester hydrochloride,

reaction products with **hyaluronate** and carbodiimides
7524-50-7DP, L-Phenylalanine methyl ester hydrochloride, reaction products
with **hyaluronate** and carbodiimides 9004-32-4DP, Sodium
carboxymethyl cellulose, reaction products with **hyaluronate** and
carbodiimides **9004-61-9DP, Hyaluronic acid,**
reaction products with carbodiimides and polysaccharides 9005-49-6DP,
Heparin sulfate, reaction products with **hyaluronate** and
carbodiimides **9067-32-7DP, Sodium hyaluronate**
, reaction products with carbodiimides and polysaccharides 10466-61-2DP,
L-Leucinamide hydrochloride, reaction products with **hyaluronate**
and carbodiimides 12768-31-9DP, Carboxymethyl amylose, reaction products
with **hyaluronate** and carbodiimides 18598-74-8DP, L-Isoleucine
methyl ester hydrochloride, reaction products with **hyaluronate**
and carbodiimides 22572-40-3DP, 1-Ethyl-3-(3-
dimethylaminopropyl)carbodiimide methiodide, reaction products with
hyaluronate and polysaccharides 22888-59-1DP, L-Arginine methyl
ester hydrochloride, reaction products with **hyaluronate** and
carbodiimides 22888-60-4DP, L-Histidine methylester hydrochloride,
reaction products with **hyaluronate** and carbodiimides
24967-94-0DP, reaction products with **hyaluronate** and
carbodiimides **25322-46-7DP**, reaction products with
hyaluronate and carbodiimides
RL: PREP (Preparation)
(prepn. of, as surgical aids and drug delivery matrixes)

IT **9004-61-9DP, Hyaluronic acid,** reaction
products with carbodiimides and polysaccharides **9067-32-7DP,**
Sodium hyaluronate, reaction products with carbodiimides
and polysaccharides **25322-46-7DP,** reaction products with
hyaluronate and carbodiimides
RL: PREP (Preparation)
(prepn. of, as surgical aids and drug delivery matrixes)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 25322-46-7 HCAPLUS
CN Chondroitin, 6-(hydrogen sulfate) (9CI) (CA INDEX NAME)

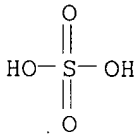
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1989:587541 HCAPLUS
DN 111:187541
TI Effect of **hyaluronic acid/chondroitin sulfate** on healing of full-thickness tendon lacerations in rabbits
AU Meyers, Steven A.; Seaber, Anthony V.; Glisson, Richard R.; Nunley, James A.
CS Med. Cent., Duke Univ., Durham, NC, USA
SO Journal of Orthopaedic Research (1989), 7(5), 683-9
CODEN: JOREDR; ISSN: 0736-0266
DT Journal
LA English
CC 1-12 (Pharmacology)
AB Viscoat, a complex of highly purified high-mol.-wt. **hyaluronic acid** (HA) with **chondroitin sulfate** (CS), was instilled around the rabbit plantar tendon following full-thickness laceration and surgical repair. After 3 wk of immobilization, no difference in adhesions or tensile strength of the healing tendons existed between Viscoat-treated tendons and controls. This contradicts previous studies which suggest that **hyaluronic acid** reduces postoperative tendon adhesions.
ST tendon laceration healing **hyaluronate chondroitin sulfate**; Viscoat tendon laceration healing
IT Tendon
(disease, injury, healing of, Viscoat effect on)
IT **9004-61-9D, Hyaluronic acid**, compd. with **chondroitin sulfate 9007-28-7D**, compd. with **hyaluronic acid 123352-36-3**, Viscoat
RL: BIOL (Biological study)
(tendon laceration healing response to)
IT **9004-61-9D, Hyaluronic acid**, compd. with **chondroitin sulfate 9007-28-7D**, compd. with **hyaluronic acid 123352-36-3**, Viscoat
RL: BIOL (Biological study)
(tendon laceration healing response to)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

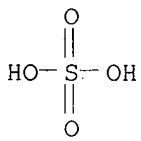
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 123352-36-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt, mixt. with hyaluronic acid sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9067-32-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9082-07-9
CMF H2 O4 S . x Na . x Unspecified

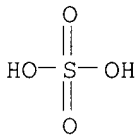
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN 1987:188973 HCAPLUS
DN 106:188973
TI Effect of anterior chamber retaining materials on the corneal endothelial function
AU Enomoto, Yoshikazu; Kurabuchi, Shinya; Kanagawa, Ryuichi; Matoba, Miho; Yamashita, Takayuki
CS Dep. Ophthalmol., Wakayama Med. Coll., 640, Japan
SO Nippon Ganka Gakkai Zasshi (1986), 90(12), 1474-8
CODEN: NGZAA6; ISSN: 0029-0203
DT Journal
LA Japanese
CC 1-12 (Pharmacology)
AB Anterior chamber retaining materials were applied on the corneal endothelium of rabbits for 15 min. **Hyaluronate** [**9004-61-9**], **chondroitin sulfate-hyaluronate** mixt. [**108145-77-3**], lactated Ringer's soln., and air were used as anterior chamber retaining materials. The corneal endothelium was perfused for 2 h with lactated Ringer's soln. in accordance with Dikstein's method. The perfusion conditions were as follows: 1.0 mL/h, 20 mmHg, 37.degree.. During irrigation, the corneal endothelium was obsd. every 30 min under specular microscope for corneal thickness measurement and photographing of endothelial cell changes.

After irrigation, the cornea was prepd. for SEM. Corneal swelling rates (speed) were 26.0 .mu.m/h in **hyaluronate**, 42.7 .mu.M/h in the **chondroitin sulfate-hyaluronate**, 28.8 .mu.m/h in lactated Ringer's soln., and 40.6 .mu.m/h in air. Compared with lactated Ringer's soln. and air, **hyaluronate** and the **chondroitin sulfate-hyaluronate** mixt. both had very high viscosity. SEM also revealed that the endothelial cells appeared to be swollen after application of all anterior chamber retaining materials, and only in the **chondroitin sulfate-hyaluronate** mixt., the pit formation was obsd. The results demonstrated the advantage of **hyaluronate** as an anterior chamber retaining material.

ST cornea endothelium anterior chamber retaining material

IT Atmosphere, environmental
(cornea endothelial function response to)

IT Named reagents and solutions
RL: BIOL (Biological study)
(Ringer's, lactated, cornea endothelial function response to)

IT Eye
(cornea, function of endothelium of, anterior chamber retaining materials effect on)

IT Pharmaceutical dosage forms
(eye solns., anterior chamber retaining materials, cornea endothelial function response to)

IT **9004-61-9 108145-77-3**
RL: BIOL (Biological study)
(cornea endothelial function response to)

IT **9004-61-9 108145-77-3**
RL: BIOL (Biological study)
(cornea endothelial function response to)

RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 108145-77-3 HCAPLUS
CN Chondroitin, hydrogen sulfate, mixt. with hyaluronic acid (9CI) (CA INDEX NAME)

CM 1

CRN 9004-61-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 9007-28-7
CMF H2 O4 S . x Unspecified

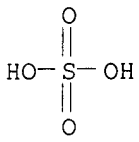
CM 3

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 7664-93-9
CMF H2 O4 S



L75 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2003 ACS
AN **1978:486179** HCAPLUS
DN **89:86179**
TI **Hyaluronic acid**
IN Nakajima, Akimasa
PA Japan
SO Jpn. Kokai Tokkyo Koho, 2 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08B037-00
CC 6-4 (General Biochemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53037700	A2	19780406	JP 1976-111983	19760914
	JP 60009044	B4	19850307		
PRAI	JP 1976-111983		19760914		

AB **Hyaluronic acid** (I) was sepd. by adjusting aq. I solns. to pH 1.8-2.8 in the presence of **chondroitinsulfuric acid** (II) to effect the pptn. of I. Thus, 1 kg whale cartilage was crushed, 1/8 wt. 50% aq. NaOH was added, the mixt. was stirred 1 h at 40.degree., made pH 3.5 with HCl, filtered, and the filtrate made pH 2.2 to ppt. a jelly. The jelly was washed with H2O, dissolved in 0.1M AcONa, and a 3-fold vol. of EtOH was added to ppt. 3.1 g pure I Na salt with a recovery of 65 g II.
ST **hyaluronate** cartilage purifn
IT **Cartilage**
(**hyaluronic acid** of, purifn. and pptn. of)
IT **9007-28-7**
RL: BIOL (Biological study)
(**hyaluronic acid** purifn. and pptn. from solns. in presence of)
IT **9067-32-7P**
RL: PREP (Preparation)
(purifn. and pptn. of, of cartilage)
IT **9007-28-7**
RL: BIOL (Biological study)
(**hyaluronic acid** purifn. and pptn. from solns. in presence of)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

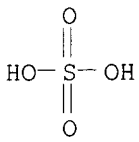
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



IT **9067-32-7P**
RL: PREP (Preparation)
(purifn. and pptn. of, of cartilage)
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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L76 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:487370 HCAPLUS
DN 137:52395
TI Hypertonic ophthalmic irrigating solution adapted for use in LASIK surgery
IN Wang, Pao-Li; Doshi, Uday; Markwardt, Kerry L.; Maddox, Emerson
PA **Alcon Universal Ltd., Switz.**
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-08
ICS A61P027-04
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002049612	A2	20020627	WO 2001-US44534	20011129
	WO 2002049612	A3	20030116		
	W: AU, BR, CA, JP, KR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2002036501	A5	20020701	AU 2002-36501	20011129
PRAI	US 2000-257464P	P	20001220		
	WO 2001-US44534	W	20011129		

AB Sterile, unpreserved, mildly hypertonic ophthalmic solns. and methods for facilitating the closure and sealing of a corneal flap during LASIK surgery are described. The hypertonicity of the solns. causes the corneal flap to contract following the photoablation step of the LASIK procedure, thereby facilitating the fit of the flap upon closure, as well as the adhesion of the flap to adjacent tissues. The soln. may also contain a viscosity-enhancing agent to further promote adhesion and sealing of the corneal flap. For example, an ophthalmic soln. contained (by wt./vol.) **chondroitin sulfate** 0.1-10%, sodium chloride 0.5-1.0% (to adjust tonicity), potassium chloride 0.075%. calcium chloride 0.048%, magnesium chloride 0.03%, sodium citrate 0.17%, sodium acetate 0.39%, hydrochloric acid/sodium hydroxide as needed for pH 6.5-8.5, and water to 100%.
ST hypertonic ophthalmic soln LASIK surgery
IT Vinyl compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carboxy-contg., polymers; hypertonic ophthalmic irrigating soln.

adapted for use in LASIK surgery)
IT **Eye**
(cornea, flap, contraction of; hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Buffers
Electrolytes
Laser radiation
(hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Collagens, biological studies
Proteoglycans, biological studies
Salts, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Solutions
(hypertonic; hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Surgery
(laser vision correction; hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyhydric; hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT Drug delivery systems
(solns., ophthalmic; hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT 50-99-7, Dextrose, biological studies 127-09-3, Sodium acetate 144-55-8, Sodium bicarbonate, biological studies 1310-73-2, Sodium hydroxide, biological studies 7447-40-7, Potassium chloride, biological studies 7558-79-4, Dibasic sodium phosphate 7647-01-0, Hydrochloric acid, biological studies 7647-14-5, Sodium chloride, biological studies 7786-30-3, Magnesium chloride, biological studies 9002-89-5, Polyvinyl alcohol 9004-34-6D, Cellulose, derivs. 9005-32-7, Alginic acid **9007-28-7, Chondroitin sulfate** 9012-76-4, Chitosan **9067-32-7, Sodium hyaluronate** 10043-52-4, Calcium chloride, biological studies 11078-30-1, Galactomannan 11138-66-2, Xanthan gum 27025-41-8, Oxidized glutathione 71010-52-1, **Gellan** gum
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hypertonic ophthalmic irrigating soln. adapted for use in LASIK surgery)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

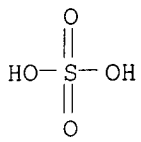
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:487369 HCAPLUS
DN 137:52394
TI Ophthalmic lubricating solution adapted for use in LASIK surgery containing polymers
IN Wang, Pao-Li; Jafari, Masoud R.; Markwardt, Kerry L.; Maddox, Emerson
PA **Alcon Universal Ltd., Switz.**; Doshi, Uday
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-08
ICS A61K047-36
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002049611	A2	20020627	WO 2001-US44533	20011129
	W: AU, BR, CA, JP, KR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2002032437	A5	20020701	AU 2002-32437	20011129
PRAI	US 2000-257304P	P	20001220		
	WO 2001-US44533	W	20011129		

AB Ocular lubricant solns. adapted to facilitate the formation of a corneal flap during LASIK surgery are described. The solns. contain one or more viscosity enhancing agents (e.g., **chondroitin sulfate** or cellulose derivs.) in a substantially salt-free, ophthalmically acceptable vehicle. For example, a lubricant soln. contained (by wt.) **chondroitin sulfate** 0-10%, glycerin 1-3%, HCl/NaOH as needed for pH 6.5-8.5, and water up to 100%.
ST polymer ophthalmic soln eye lubricant vision surgery
IT Viscosity
(agents for increase of; polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT Vinyl compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carboxy-contg., polymers; polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT **Eye**
(cornea, flap; polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT Surgery
(laser vision correction; polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT Biopolymers
Collagens, biological studies
Proteoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT Drug delivery systems
(solns., ophthalmic; polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT 56-81-5, Glycerin, biological studies 9002-89-5, Polyvinyl alcohol 9004-34-6D, Cellulose, derivs. 9004-65-3, Hydroxypropyl methyl cellulose 9005-32-7, Alginic acid **9007-28-7, Chondroitin sulfate** 9012-76-4, Chitosan **9067-32-7, Sodium hyaluronate** 11078-30-1, Galactomannan 11138-66-2, Xanthan gum 71010-52-1, **Gellan** gum
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymer-based ophthalmic lubricating soln. adapted for use in LASIK surgery)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

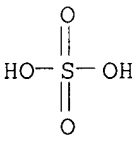
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:487368 HCAPLUS
DN 137:52393
TI Ophthalmic irrigating solution adapted for use in lasik surgery
IN Doshi, Uday; Markwardt, Kerry L.; Wang, Pao-Li; Maddox, Emerson
PA **Alcon Universal Ltd., Switz.**
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-08
ICS A61K047-36
CC 63-6 (Pharmaceuticals)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2002049610	A2	20020627	WO 2001-US44526	20011129
	W: AU, BR, CA, JP, KR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2002030504	A5	20020701	AU 2002-30504	20011129
PRAI	US 2000-257571P	P	20001220		
	WO 2001-US44526	W	20011129		

AB Compns. and methods for facilitating the formulation and closure of a corneal flap during LASIK surgery are described. The compns. and methods are based on the use of one or more viscosity-enhancing agents (e.g., **chondroitin sulfate**) to provide an ophthalmic irrigating soln. with improved coating properties and prolonged dwelling time on the cornea, thereby providing lubrication for the microkeratome used to form the corneal flap, reduce corneal epithelial abrasions, and help to produce smooth and consistent cuts with the microkeratome blade.

ST eye irrigating soln Lasik surgery **chondroitin sulfate**

IT Vinyl compounds, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carboxy-contg., polymers; ophthalmic irrigating soln. adapted for use in lasik surgery)

IT Physiological saline solutions
Viscosity
(ophthalmic irrigating soln. adapted for use in lasik surgery)

IT Proteoglycans, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic irrigating soln. adapted for use in lasik surgery)

IT Drug delivery systems
(solns., ophthalmic; ophthalmic irrigating soln. adapted for use in lasik surgery)

IT **Eye**
(surgery; ophthalmic irrigating soln. adapted for use in lasik surgery)

IT 9002-89-5, Polyvinyl alcohol 9004-34-6D, Cellulose, derivs. 9005-32-7, Alginic acid 9012-76-4, Chitosan 11078-30-1, Galactomannan 11138-66-2, Xanthan gum 71010-52-1, **Gellan** gum
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic irrigating soln. adapted for use in lasik surgery)

IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic irrigating soln. adapted for use in lasik surgery)

IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic irrigating soln. adapted for use in lasik surgery)

RN 9007-28-7 HCAPLUS

CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

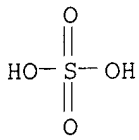
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:332029 HCAPLUS
DN 136:319437
TI Use of hydroxyeicosatetraenoic acid derivatives in intraocular surgery
IN Karakelle, Mutlu; Chan, Kwan
PA **Alcon Universal Ltd., Switz.**
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-202
ICS A61P041-00; A61L031-04; C07C051-00
CC 1-12 (Pharmacology)
Section cross-reference(s): 9, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002034258	A1	20020502	WO 2001-US30212	20010927
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2002014543	A5	20020506	AU 2002-14543	20010927
	US 2002103257	A1	20020801	US 2001-965348	20010927
	US 6462082	B2	20021008		
PRAI	US 2000-242501P	P	20001023		
	WO 2001-US30212	W	20010927		

OS MARPAT 136:319437
AB The use of HETE derivs. in intraocular surgery (e.g., cataract surgery) is disclosed. The HETE derivs. protect and maintain the corneal endothelium.
ST hydroxyeicosatetraenoate deriv intraocular surgery cornea endothelium; cataract surgery protection cornea endothelium HETE deriv
IT **Eye**
(cornea, endothelium; hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT Drug delivery systems
Viscoelastic materials
(hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT Surgery
(intraocular; hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT Drug delivery systems
(ophthalmic; hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT Drug delivery systems
(solns., ophthalmic; hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT Drug delivery systems
(solns., surgical irrigating solns.; hydroxyeicosatetraenoic acid

derivs. for protection of corneal endothelium during intraocular surgery)
IT Cataract
Eye
(surgery; hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT 69845-60-9D, Hydroxyeicosatetraenoic acid, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
IT 50-99-7, Dextrose, biological studies 64-17-5, Ethanol, biological studies 144-55-8, Sodium bicarbonate, biological studies 1310-73-2, Sodium hydroxide, biological studies 7447-40-7, Potassium chloride, biological studies 7558-79-4, Dibasic sodium phosphate 7558-80-7, Monobasic sodium phosphate 7647-01-0, Hydrochloric acid, biological studies 7647-14-5, Sodium chloride, biological studies 7732-18-5, Water, biological studies 7786-30-3, Magnesium chloride, biological studies **9067-32-7, Hyaluronic acid sodium salt 9082-07-9,** Sodium **chondroitin sulfate** 10043-52-4, Calcium chloride, biological studies 27025-41-8, Glutathione disulfide
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Alcon Universal Ltd; WO 0134554 A 2001 HCAPLUS
(2) Hecht, G; US 5409904 A 1995 HCAPLUS
(3) Kavoussi, H; US 5103840 A 1992
(4) Meyer, M; DE 19853007 A 2000
(5) Schwartzman, M; US 4906467 A 1990 HCAPLUS
(6) Yanni, J; US 5696166 A 1997 HCAPLUS
IT **9067-32-7, Hyaluronic acid sodium salt 9082-07-9,** Sodium **chondroitin sulfate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxyeicosatetraenoic acid derivs. for protection of corneal endothelium during intraocular surgery)
RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9082-07-9 HCAPLUS
CN Chondroitin, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

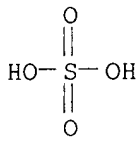
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



L76 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:693076 HCAPLUS
DN 135:231721
TI **Viscoelastics** for use in middle ear surgery
IN Jafari, Masoud R.; Doshi, Uday
PA **Alcon Universal Ltd., Switz.**
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001068079	A2	20010920	WO 2001-US8064	20010314
	WO 2001068079	A3	20020725		
	W: AU, BR, CA, CN, JP, MX, PL, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	EP 1267894	A2	20030102	EP 2001-920347	20010314
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2002169142	A1	20021114	US 2001-857543	20010606
PRAI	US 2000-189179P	P	20000314		
	WO 2001-US8064	W	20010314		

AB **Viscoelastic** compns. for surgical and non-surgical packing and drug delivery, esp., in conjunction with trauma to or disorders of the ear are disclosed. Thus, a highly viscous soln. contained HPMC (E4M-K100M) 2-8, CaCl2 0.048, NaCl 0.525, KCl 0.075, MgCl2 0.030, sodium citrate 0.170, sodium acetate 0.390 and water to 100%.
ST **viscoelastic** middle ear surgery
IT Ear
(middle; **viscoelastic** materials for middle ear surgery)
IT Drug delivery systems
Surgery
Viscoelastic materials
Viscosity
(**viscoelastic** materials for middle ear surgery)
IT Acrylic polymers, biological studies
Collagens, biological studies
Proteoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** materials for middle ear surgery)
IT 9003-05-8, Polyacrylamide 9003-39-8, PVP 9003-97-8, Polycarbophil 9004-32-4, Carboxymethyl cellulose 9004-57-3, Ethyl cellulose **9004-61-9, Hyaluronic acid** 9004-62-0, Hydroxyethyl cellulose 9004-65-3, HPMC 9004-67-5, Methyl cellulose **9007-28-7, Chondroitin sulfate** 9012-76-4, Chitosan **9067-32-7, Sodium hyaluronate** 106392-12-5, Poloxamer 169799-44-4, Keratin (polysaccharide)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** materials for middle ear surgery)
IT **9004-61-9, Hyaluronic acid 9007-28-7**

, **Chondroitin sulfate 9067-32-7,**
Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** materials for middle ear surgery)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

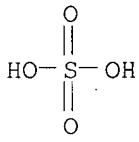
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2000:420945 HCAPLUS
DN 133:63951
TI **Viscoelastic** compositions containing antioxidants
IN Shah, Mandar V.; Doshi, Uday; Markwardt, Kerry L.
PA **Alcon Laboratories, Inc., USA**
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000035432	A2	20000622	WO 1999-US29442	19991210
WO 2000035432	A3	20001116		

W: AU, BR, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI US 1998-112663P P 19981217
AB Compns. and methods for treating mammalian tissues are disclosed. The compns. have improved stability, and are **viscoelastic** compns. comprising physiol. antioxidants, bifunctional compds. having an anti-inflammatory and anti-oxidant moiety covalently linked by an amide or ester bond, in a **viscoelastic** vehicle. The methods are

particularly useful in the prevention or treatment of inflammatory and proliferative events incident to ocular surgery. Thys, a **viscoelastic** compn. contained (S)-6-methoxy-.alpha.-methylnaphthaleneacetic acid (R)-2-(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)ethyl ester 0.00146, Cremophor EL 1.0, **sodium hyaluronate** 1.0, dibasic sodium phosphate 0.056, monobasic sodium phosphate monohydrate 0.004, NaCl 0.84, sodium ascorbate 0.025, HCl/NaOH (pH adjustment) and water qs.

ST **viscoelastic** pharmaceutical antioxidant; naphthaleneacetate benzopyranethyl ester **viscoelastic** pharmaceutical

IT Carboxylic acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzenecarboxylic; **viscoelastic** compns. contg. antioxidants)

IT Animal tissue
(disorders; **viscoelastic** compns. contg. antioxidants)

IT Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethoxylated; **viscoelastic** compns. contg. antioxidants)

IT **Eye**, disease
(inflammation; **viscoelastic** compns. contg. antioxidants)

IT Anti-inflammatory agents
(nonsteroidal; **viscoelastic** compns. contg. antioxidants)

IT Antioxidants
Drug delivery systems
Eye, disease
Viscoelasticity
(**viscoelastic** compns. contg. antioxidants)

IT Collagens, biological studies
Proteoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** compns. contg. antioxidants)

IT 50-81-7, Vitamin C, biological studies 50-81-7D, Vitamin C, salts 53-86-1D, Indomethacin, derivs. 61-68-7D, Mefenamic acid, derivs. 68-26-8, Vitamin A 70-18-8, Reduced glutathione, biological studies 134-03-2, Sodium ascorbate 530-78-9D, Flufenamic acid, derivs. 644-62-2D, derivs. 1406-18-4, Vitamin E 4394-00-7D, Niflumic acid, derivs. 5104-49-4D, Flurbiprofen, derivs. 7558-79-4, Dibasic sodium phosphate 7558-80-7, Monobasic sodium phosphate 7647-14-5, Sodium chloride, biological studies 9003-05-8, Polyacrylamide 9003-39-8, PVP 9004-32-4, Carboxymethyl cellulose sodium salt 9004-57-3, Ethyl cellulose 9004-65-3, HPMC 9004-67-5, Methyl cellulose
9007-28-7, Chondroitin sulfate
9067-32-7, Sodium hyaluronate 10049-21-5
13710-19-5D, Tolfenamic acid, derivs. 15307-86-5D, Diclofenac, derivs. 15687-27-1D, Ibuprofen, derivs. 17969-20-9D, Fenclozic acid, derivs. 22071-15-4D, Ketoprofen, derivs. 22131-79-9D, Alclofenac, derivs. 22204-53-1D, Naproxen, derivs. 22494-42-4D, Diflunisal, derivs. 26171-23-3D, Tolmetin, derivs. 29679-58-1D, Fenoprofen, derivs. 31793-07-4D, Pirprofen, derivs. 31842-01-0D, Indoprofen, derivs. 33369-31-2D, Zomepirac, derivs. 34148-01-1D, Clidanac, derivs. 34645-84-6D, Fenclofenac, derivs. 36330-85-5D, Fenbufen, derivs. 36616-52-1D, Fenclorac, derivs. 38194-50-2D, Sulindac, derivs. 40828-46-4D, Suprofen, derivs. 41340-25-4D, Etodolic acid, derivs. 50270-33-2D, Isofezolac, derivs. 51234-28-7D, Benoxaprofen, derivs. 51579-82-9D, Amfenac, derivs. 52549-17-4D, Pranoprofen, derivs. 53716-49-7D, Carprofen, derivs. 60653-25-0D, Orpanoxin, derivs. 68767-14-6D, Loxoprofen, derivs. 69992-87-6, Keratan 74103-06-3D, Ketorolac, derivs. 74711-43-6D, Zaltoprofen, derivs. 91714-94-2D, Bromfenac, derivs. 180344-46-1 180344-47-2 180344-49-4 180344-50-7 193221-42-0 193221-43-1 276682-91-8 276682-92-9 276682-93-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** compns. contg. antioxidants)

IT **9007-28-7, Chondroitin sulfate**

9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** compns. contg. antioxidants)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

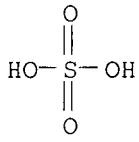
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:618373 HCAPLUS
DN 129:265472
TI **Viscoelastic** compositions and methods of use
IN Yanni, John M.; Graff, Gustav
PA **Alcon Laboratories, Inc., USA**
SO U.S., 11 pp., Cont.-in-part of U.S. 5,607,966.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-355
ICS A61K031-34
NCL 514458000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5811453	A	19980922	US 1996-768747	19961217
	WO 9826777	A1	19980625	WO 1997-US22686	19971216
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9855215	A1	19980715	AU 1998-55215	19971216
	AU 728497	B2	20010111		
	EP 946171	A1	19991006	EP 1997-951623	19971216
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001506651	T2	20010522	JP 1998-527816	19971216
	US 6242480	B1	20010605	US 1999-308851	19990524
PRAI	US 1994-368718	A2	19941223		
	US 1994-362718	A2	19941223		

US 1996-768747 A 19961217
WO 1997-US22686 W 19971216
OS MARPAT 129:265472
AB Compds. and methods for treating ocular tissues are disclosed. The methods utilize **viscoelastic** compns. contg. certain compds. having an anti-inflammatory and anti-oxidant moiety covalently linked by an amide or ester bond. The compds. are useful in preventing and treating inflammatory and proliferative disorders through several mechanisms. Use of a surgical soln. contg. 2-(6-hydroxy-2,5,7,8-tetramethyl-3,4-dihydro-2H-benzo[1,2-b]pyran-2-yl)ethyl-2-(6-methoxy-2-naphthyl)propionate (I) for glaucoma filtration surgery in rabbits ameliorated inflammatory conditions resulting from the surgery and decreased bleb failure. A preferred compn. contained I 0.000023, Cremophor EL 0.05, **Na hyaluronate** 1, Na2HPO4 0.056, NaH2PO4.cntdot.H2O 0.004, NaCl 0.84, HCl q.s., NaOH q.s, and water to 100 % wt./vol.
ST antiinflammatory antioxidant conjugate **viscoelastic** ophthalmic liq; naproxen deriv **hyaluronate** ophthalmic soln
IT **Eye**, disease
(inflammation; **viscoelastic** compns. contg. compds. with anti-inflammatory and antioxidant moieties for treating ocular tissue)
IT **Viscoelastic** materials
(liq.; **viscoelastic** compns. contg. compds. with anti-inflammatory and antioxidant moieties for treating ocular tissue)
IT Drug delivery systems
(solns., ophthalmic; **viscoelastic** compns. contg. compds. with anti-inflammatory and antioxidant moieties for treating ocular tissue)
IT 53-86-1D, Indomethacin;, derivs. 61-68-7D, Mefenamic acid, derivs. 530-78-9D, Flufenamic acid, derivs. 644-62-2D, derivs. 4394-00-7D, Niflumic acid, derivs. 5104-49-4D, Flurbiprofen;, derivs. 9004-65-3, HPMC **9007-28-7**, **Chondroitin sulfate** **9067-32-7**, **Sodium hyaluronate** 13710-19-5D, Tolfenamic acid, derivs. 15307-86-5D, Diclofenac., derivs. 15687-27-1D, Ibuprofen;, derivs. 22071-15-4D, Ketoprofen;, derivs. 22131-79-9D, Alclofenac, derivs. 22204-53-1D, Naproxen;, derivs. 22494-42-4D, Diflunisal;, derivs. 26171-23-3D, Tolmetin, derivs. 29679-58-1D, Fenoprofen;, derivs. 30544-47-9D, Etofenamate, derivs. 31793-07-4D, Pirprofen;, derivs. 31842-01-0D, Indoprofen;, derivs. 33369-31-2D, Zomepirac;, derivs. 34148-01-1D, Clidanac;, derivs. 34645-84-6D, Fenclofenac;, derivs. 36330-85-5D, Fenbufen;, derivs. 36616-52-1D, Fenclorac;, derivs. 38194-50-2D, Sulindac;, derivs. 40828-46-4D, Suprofen;, derivs. 41340-25-4D, Etodolic acid, derivs. 50270-33-2D, Isofezolac;, derivs. 51234-28-7D, Benoxaprofen, derivs. 51579-82-9D, Amfenac;, derivs. 52549-17-4D, Pranoprofen;, derivs. 53716-49-7D, Carprofen;, derivs. 60653-25-0D, Orpanoxin;, derivs. 68767-14-6D, Loxoprofen;, derivs. 74103-06-3D, Ketorolac;, derivs. 74711-43-6D, Zaltoprofen, derivs. 91714-94-2D, Bromfenac;, derivs. 180344-46-1 180344-47-2 180344-49-4 180344-50-7 193221-42-0 193221-43-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** compns. contg. compds. with anti-inflammatory and antioxidant moieties for treating ocular tissue)
RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; JP 58072579 A 1983 HCAPLUS
(2) Anon; DE 3407507 A1 1985 HCAPLUS
(3) Anon; EP 0183869 A1 1986 HCAPLUS
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(14) Anon; WO 9325187 1993 HCAPLUS
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IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**viscoelastic** compns. contg. compds. with anti-inflammatory and antioxidant moieties for treating ocular tissue)

RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

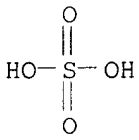
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:424121 HCAPLUS
DN 129:86034
TI Ophthalmic **viscoelastic** compositions
IN Yanni, John M.; Graff, Gustav
PA **Alcon Laboratories, Inc., USA**; Yanni, John M.; Graff, Gustav
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-35
ICS A61K031-24; A61K031-355
CC 63-6 (Pharmaceuticals)
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9826777	A1	19980625	WO 1997-US22686	19971216
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5811453	A	19980922	US 1996-768747	19961217
	AU 9855215	A1	19980715	AU 1998-55215	19971216
	AU 728497	B2	20010111		
	EP 946171	A1	19991006	EP 1997-951623	19971216
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001506651	T2	20010522	JP 1998-527816	19971216
	US 6242480	B1	20010605	US 1999-308851	19990524
PRAI	US 1996-768747	A	19961217		
	US 1994-362718	A2	19941223		
	US 1994-368718	A2	19941223		
	WO 1997-US22686	W	19971216		

OS MARPAT 129:86034
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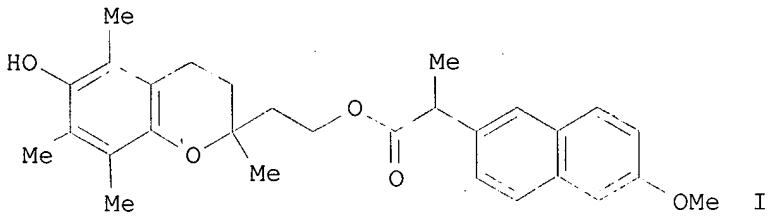

I

AB Ophthalmic **viscoelastic** compns. contain a non-steroidal

antiinflammatory agent linked, either directly or via a linker to a benzopyran or benzofuran deriv. in a **viscoelastic** vehicle. Thus, a preferred compn. contains ester I 0.000023, Cremophor EL 0.05, **hyaluronic acid** Na salt 1, Na2HPO4 0.056, NaH2PO4 0.004, NaCl 0.84 % w/v in water, pH adjusted with NaOH and HCl.

ST antiinflammatory **viscoelastic** ophthalmic compn

IT Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethoxylated; ophthalmic **viscoelastic** compns. contg. a non-steroidal antiinflammatory agent)

IT Drug delivery systems
(ophthalmic; ophthalmic **viscoelastic** compns. contg. a non-steroidal antiinflammatory agent)

IT 53-86-1, Indomethacin 61-68-7, Mefenamic acid 530-78-9, Flufenamic acid 644-62-2 1310-73-2, Sodium hydroxide, biological studies 4394-00-7, Niflumic acid 5104-49-4, Flurbiprofen 7558-79-4, Disodium hydrogen phosphate 7558-80-7, Sodium dihydrogen phosphate 7647-01-0, Hydrochloric acid, biological studies 7647-14-5, Sodium chloride, biological studies 7732-18-5, Water, biological studies 9004-65-3, HPMC **9007-28-7, Chondroitin sulfate** **9067-32-7, Sodium hyaluronate** 13710-19-5, Tolfenamic acid 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 22131-79-9, Alclofenac 22204-53-1, Naproxen 22494-42-4, Diflunisal 26171-23-3, Tolmetin 29679-58-1, Fenoprofen 30544-47-9, Etofenamate 31793-07-4, Pirprofen 31842-01-0, Indoprofen 33369-31-2, Zomepirac 34148-01-1, Clidanac 34645-84-6, Fenclofenac 36330-85-5, Fenbufen 36616-52-1, Fenclorac 38194-50-2, Sulindac 40828-46-4, Suprofen 41340-25-4, Etodolic acid 50270-33-2, Isofezolac 51234-28-7, Benoxaprofen 51579-82-9, Amfenac 52549-17-4, Pranoprofen 53716-49-7, Carprofen 60653-25-0, Orpanoxin 68767-14-6, Loxoprofen 74103-06-3, Ketorolac 74711-43-6, Zaltoprofen 91714-94-2, Bromfenac 180344-46-1 180344-47-2 180344-49-4 180344-50-7 193221-42-0 193221-43-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic **viscoelastic** compns. contg. a non-steroidal antiinflammatory agent)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Alcon Laboratories; WO 9620187 A 1996 HCAPLUS
(2) Alcon Laboratories Inc; WO 9710236 A 1997 HCAPLUS
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(6) Hellberg, R; US 5424321 A 1995 HCAPLUS
(7) Santen Pharmaceutical Co; EP 0572190 A 1993 HCAPLUS

IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic **viscoelastic** compns. contg. a non-steroidal antiinflammatory agent)

RN 9007-28-7 HCAPLUS

CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

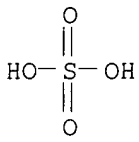
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:737582 HCAPLUS
DN 123:123201
TI Combinations of polymers for use in artificial tear compositions
IN Bhagat, Haresh G.
PA **Alcon Laboratoires, Inc., USA**
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-00
ICS A61K033-10
CC 63-6 (Pharmaceuticals)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 663208	A2	19950719	EP 1994-650039	19941219
	EP 663208	A3	19951115		
	EP 663208	B1	19970502		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CA 2134376	AA	19950621	CA 1994-2134376	19941026
	CA 2134376	C	20011023		
	JP 07196474	A2	19950801	JP 1994-294879	19941129
	AT 152348	E	19970515	AT 1994-650039	19941219
	ES 2102175	T3	19970716	ES 1994-650039	19941219
	AU 9481604	A1	19950629	AU 1994-81604	19941220
	AU 675371	B2	19970130		
	US 5460834	A	19951024	US 1995-371043	19950110
PRAI	US 1993-170482	A	19931220		
	US 1991-807528	B1	19911213		
	US 1992-844269	B1	19920302		
	US 1992-994051	B2	19921216		
	US 1993-31058	B2	19930312		

AB Physiol. tear compns. for the treatment of dry eye syndrome are disclosed which have a high viscosity and contain bicarbonate, a cellulosic polymer and/or a glycosaminoglycan and/or a carboxyvinyl polymer. A claimed compn. with a viscosity 5-10,000 cP comprises: (a) potassium ions 11-25 mmol/L; (b) calcium ions 0.2-0.5 mmol/L; (c) magnesium ions 0.15-0.45 mmol/L; (d) bicarbonate ions 1-36 mmol/L; (e) at least one component from a group consisting a cellulosic polymer, a glycosaminoglycan, and a carboxyvinyl polymer. For example, an eye soln. contained hydroxypropyl Me cellulose 0.5, mannitol q.s., CaCl2.cntdot.2H2O 0.0053, MgCl2.cntdot.6H2O 0.0064, ZnCl2 0.00015, KHCO3 0.1, Carbomer 934P 0.175, and purified water to 100%.
ST artificial tear dry eye polymer salt
IT Glycosaminoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(salts and polymers for use in artificial tear compns.)
IT Tear
(artificial, salts and polymers for use in artificial tear compns.)
IT Vinyl compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carboxy-contg., polymers, salts and polymers for use in artificial tear compns.)
IT Eye, disease
(keratoconjunctivitis sicca, salts and polymers for use in artificial tear compns.)
IT Pharmaceutical dosage forms
(ophthalmic, salts and polymers for use in artificial tear compns.)
IT 144-55-8, Sodium bicarbonate, biological studies 298-14-6, Potassium bicarbonate 7447-40-7, Potassium chloride, biological studies 7646-85-7, Zinc chloride, biological studies 7786-30-3, Magnesium chloride, biological studies 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose **9007-28-7, Chondroitin sulfate 9067-32-7, Sodium hyaluronate** 10043-52-4, Calcium chloride, biological studies 57916-92-4, Carbomer 934P 76050-42-5, Carbomer 940 91315-32-1, Carbomer 910 96827-24-6, Carbomer 1342 139637-85-7, Carbomer 980
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts and polymers for use in artificial tear compns.)
IT **9007-28-7, Chondroitin sulfate**
9067-32-7, Sodium hyaluronate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts and polymers for use in artificial tear compns.)
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

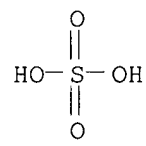
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L76 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:602342 HCAPLUS
DN 123:17996
TI **Hyaluronic acid** compositions useful as an irrigating solution in surgery
IN Hecht, Gerald; Lorenzetti, Ole J.

PA **Alcon Laboratories, Inc., USA**
SO U.S., 7 pp. Cont. of U.S. Ser. No. 553,924, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N043-04
NCL 514023000
CC 63-8 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5409904	A	19950425	US 1992-977312	19921116
	WO 9632929	A1	19961024	WO 1995-US4816	19950419
	W: AU, CA, JP, MX				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9523895	A1	19961107	AU 1995-23895	19950419
	US 5578578	A	19961126	US 1995-425132	19950419
PRAI	US 1984-671042		19841113		
	US 1986-899167		19860822		
	US 1987-95601		19870910		
	US 1990-553924		19900717		
	US 1992-977312		19921116		
	WO 1995-US4816		19950419		

AB Disclosed are solns. useful in surgery comprising a viscous or **viscoelastic** substance in an aq. vehicle which is characterized as physiol. compatible; also disclosed are methods of using such solns., implanting such viscous or **viscoelastic** substances, while minimizing the traumatic effect of surgery at the cellular level. A soln. for use during ocular surgery contained **Na hyaluronate** 1, NaCl 1, dried Na phosphate 1, CaCl2 1, MgCl2 1, dextrose 1, glutathione 0.5, NaHCO3 1, NaOH/HCl q.s. to pH 7.2, and purified water to 100 parts.
ST **hyaluronate** irrigation soln ocular surgery
IT Collagens, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hyaluronic acid** compns. useful as irrigating soln. in surgery)
IT Surgery
(ocular; **hyaluronic acid** compns. useful as irrigating soln. in surgery)
IT **Eye**
(surgery of; **hyaluronic acid** compns. useful as irrigating soln. in surgery)
IT 50-99-7, Dextrose, biological studies 70-18-8, Glutathione, biological studies 144-55-8, Sodium bicarbonate, biological studies 7447-40-7, Potassium chloride, biological studies 7632-05-5, Sodium phosphate 7647-14-5, Sodium chloride, biological studies 7786-30-3, Magnesium chloride, biological studies **9004-61-9, Hyaluronic acid** 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose **9007-28-7, Chondroitin sulfate** 9062-14-0, Hydroxypropyl ethyl cellulose **9067-32-7, Sodium hyaluronate** 10043-52-4, Calcium chloride, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hyaluronic acid** compns. useful as irrigating soln. in surgery)
IT **9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate 9067-32-7, Sodium hyaluronate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hyaluronic acid** compns. useful as irrigating soln. in surgery)
RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

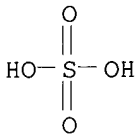
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9067-32-7 HCAPLUS
CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> fil medline
FILE 'MEDLINE' ENTERED AT 17:13:33 ON 15 MAR 2003

FILE LAST UPDATED: 14 MAR 2003 (20030314/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2003 vocabulary. See http://www.nlm.nih.gov/mesh/summ2003.html for a description on changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot l124

L124 ANSWER 1 OF 2 MEDLINE
AN **2002265171** MEDLINE
DN **21925045** PubMed ID: **11927686**
TI Interactive effect of **chondroitin sulphate** C and **hyaluronan** on fluid movement across rabbit synovium.
AU Sabaratnam S; Coleman P J; Badrick E; Mason R M; Levick J R
CS Department of Physiology, St George's Hospital Medical School, London SW17 0RE, UK.
SO JOURNAL OF PHYSIOLOGY, (2002 Apr 1) 540 (Pt 1) 271-84.
Journal code: 0266262. ISSN: 0022-3751.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals

EM 200209
ED Entered STN: 20020514
Last Updated on STN: 20020924
Entered Medline: 20020923
AB The polysaccharide **hyaluronan** (HA) conserves synovial fluid by keeping outflow low and almost constant over a wide pressure range ('buffering'), but only at concentrations associated with polymer domain overlap. We therefore tested whether polymer interactions can cause buffering, using HA-**chondroitin sulphate** C (CSC) mixtures. Also, since it has been found that capillary filtration is insensitive to the Starling force interstitial osmotic pressure in frog mesenteries, this was assessed in synovium. **Hyaluronan** at non-buffering concentrations (0.50-0.75 mg ml(-1)) and/or 25 mg ml(-1) CSC (osmotic pressure 68 cmH(2)O) was infused into knees of anaesthetised rabbits in vivo. Viscometry and chromatography confirmed that HA interacts with CSC. Pressure (P(j)) versus trans-synovial flow (;Q(s)) relations were measured.;Q(s) was outwards for HA alone (1.2 +/- 0.9 microl min(-1) at 3 cmH(2)O, mean +/- S.E.M.; n = 6). CSC diffused into synovium and changed;Q(s) to filtration at low P(j) (-4.1 microl min(-1), 3 cmH(2)O, n = 5, P < 0.02, t test). Filtration ceased upon circulatory arrest (n = 3). At higher P(j), 0.75 mg ml(-1) HA plus CSC buffered;Q(s) to approximately 3 microl min(-1) over a wide range of P(j), with an outflow increase of only 0.04 +/- 0.02 microl min(-1) cmH(2)O(-1) (n = 4). With HA or CSC alone, buffering was absent (slopes 0.57 +/- 0.04 microl min(-1) cmH(2)O(-1) (n = 4) and 0.86 +/- 0.05 microl min(-1) cmH(2)O(-1) (n = 5), respectively). Therefore, polymer interactions can cause outflow buffering in joints. Also, interstitial osmotic pressure promoted filtration in fenestrated synovial capillaries, so the results for frog mesentery capillaries cannot be generalised. The difference is attributed to differences in pore ultrastructure.
CT Check Tags: Animal; Support, Non-U.S. Gov't
*Adjuvants, Immunologic: PD, pharmacology
Biological Transport: DE, drug effects
Capillary Permeability: DE, drug effects
***Chondroitin Sulfates: PD, pharmacology**
Drug Interactions
***Hyaluronic Acid: PD, pharmacology**
Knee Joint: ME, metabolism
Models, Biological
Osmotic Pressure
Polymers: ME, metabolism
Rabbits
***Synovial Fluid: ME, metabolism**
Synovial Membrane: BS, blood supply
Synovial Membrane: DE, drug effects
***Synovial Membrane: ME, metabolism**
Viscosity
RN **9004-61-9 (Hyaluronic Acid); 9007-28-7 (Chondroitin Sulfates)**
CN 0 (Adjuvants, Immunologic); 0 (Polymers)

L124 ANSWER 2 OF 2 MEDLINE
AN **95271545** MEDLINE
DN **95271545** PubMed ID: **7752124**
TI Effects of **hyaluronic acid** on the release of cartilage matrix proteoglycan and fibronectin from the cell matrix layer of chondrocyte cultures: interactions between **hyaluronic acid** and **chondroitin sulfate** glycosaminoglycan.
AU Kato Y; Mukudai Y; Okimura A; Shimazu A; Nakamura S
CS Department of Biochemistry, School of Dentistry, Hiroshima University, Japan.
SO JOURNAL OF RHEUMATOLOGY. SUPPLEMENT, (1995 Feb) 43 158-9.

Journal code: 7806058. ISSN: 0380-0903.
CY Canada
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199506
ED Entered STN: 19950629
Last Updated on STN: 19950629
Entered Medline: 19950622
AB **Hyaluronic acid** (HA) of large sizes suppressed the release of cartilage matrix proteoglycan, fibronectin, and other macromolecules from the cell matrix layer of chondrocyte cultures, perhaps because HA of large sizes formed a viscous barrier in the matrix by its interactions with other extracellular matrix macromolecules. To test this possibility, we determined the viscosity of solutions containing HA of various sizes in the presence of proteoglycan monomer or **chondroitin sulfate** glycosaminoglycan (GAG). Not only the monomer but also **chondroitin sulfate** increased the viscosity of HA solutions, depending on the size of HA. These findings suggest that HA of large sizes increases the viscosity near the surface of articular cartilage by sugar-sugar and by sugar-protein interactions and that the increase of viscosity is involved in the protective action of HA on arthritic cartilage.
CT Check Tags: Animal; Support, Non-U.S. Gov't
Cartilage: CY, cytology
***Cartilage: DE, drug effects**
Cartilage: ME, metabolism
Cells, Cultured
***Chondroitin Sulfates: PD, pharmacology**
Drug Interactions
Fibronectins: DE, drug effects
*Fibronectins: ME, metabolism
***Hyaluronic Acid: PD, pharmacology**
Proteoglycans: DE, drug effects
*Proteoglycans: ME, metabolism
Rabbits
RN **9004-61-9 (Hyaluronic Acid); 9007-28-7 (Chondroitin Sulfates)**
CN 0 (Fibronectins); 0 (Proteoglycans); 0 (**chondroitin sulfate** glycosaminoglycan)

=> fil embase
FILE 'EMBASE' ENTERED AT 17:24:12 ON 15 MAR 2003

FILE COVERS 1974 TO 13 Mar 2003 (20030313/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all

L153 ANSWER 1 OF 1 EMBASE
AN **94096368** EMBASE
DN **1994096368**
TI **Hyaluronic acid**. A review of its pharmacology and use as a surgical aid in ophthalmology, and its therapeutic potential in joint disease and wound healing.
AU Goa K.L.; Benfield P.
CS Adis International Limited, 41 Centorian Drive,Mairangi Bay, Auckland 10,

New Zealand
SO Drugs, (1994) 47/3 (536-566).
ISSN: 0012-6667 CODEN: DRUGAY
CY New Zealand
DT Journal; General Review
FS 012 Ophthalmology
030 Pharmacology
031 Arthritis and Rheumatism
033 Orthopedic Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English

AB **Hyaluronic acid** is a naturally occurring polysaccharide with distinct physicochemical properties which underlie its application as a viscoelastic tool in ophthalmological surgery. In cataract surgery the role of **hyaluronic acid** in facilitating procedures and protecting the corneal endothelium is well established. Some benefit was also been gained with the use of **hyaluronic acid** in penetrating keratoplasty trabeculectomy retinal reattachment and trauma surgery although its efficacy in these indications is less well-defined in the published literature. In addition to its lubricating and cushioning properties demonstration of some in vitro anti-inflammatory activity and a possible disease-modifying effect for **hyaluronic acid** in animals has prompted its investigation as a treatment in osteoarthritis and to a much lesser extent in rheumatoid arthritis. **Hyaluronic acid** 20mg as weekly intra-articular injections for 3 to 7 weeks improved knee pain and joint motion in patients with osteoarthritis. Although this occurred to a greater degree than with placebo in most comparisons the effects of **hyaluronic acid** was similar to those of placebo in the largest trial. In the few available comparisons with other agents **hyaluronic acid** appeared equivalent to methylprednisolone 40mg (for 3 weeks) and to a single injection of triamcinolone 40mg. **Hyaluronic acid** was distinguished from other therapies by providing a sustained effect after treatment discontinuation. Together with its very good tolerability profile these properties justify further study of **hyaluronic acid** in patients with osteoarthritis. Some limited evidence of improvement in patients with rheumatoid arthritis and a possible healing effect of **hyaluronic acid** on tympanic membrane perforations represent additional areas of interest for future investigation. In summary **hyaluronic acid** is a well-established adjunct to cataract surgery and may prove to be a promising option in the treatment of patients with osteoarthritis. Its very good tolerability provides further impetus for examination of its potential role in on extended scope of arthritic and ophthalmological indications and in wound healing.

CT Medical Descriptors:
***arthropathy: DT, drug therapy**
*eye surgery
*wound healing
cartilage
cataract extraction
clinical trial
cornea endothelium
cornea transplantation
drug binding
drug blood level
drug effect
drug elimination
drug formulation
drug half life

drug structure
eardrum perforation: DT, drug therapy
eye injury: SU, surgery
female
glaucoma: SU, surgery
human
inflammation: SI, side effect
intraarticular drug administration
intraocular pressure
iritis: SI, side effect
meta analysis
nonhuman
osteoarthritis: DT, drug therapy
pharmacodynamics
rat
retina surgery
review
rheumatoid arthritis: DT, drug therapy
synovial fluid
trabeculectomy
viscoelasticity
Drug Descriptors:
***hyaluronic acid: AE, adverse drug reaction**
***hyaluronic acid: CT, clinical trial**
***hyaluronic acid: AD, drug administration**
***hyaluronic acid: CM, drug comparison**
***hyaluronic acid: DO, drug dose**
***hyaluronic acid: DT, drug therapy**
***hyaluronic acid: PK, pharmacokinetics**
***hyaluronic acid: PD, pharmacology**
chondroitin sulfate: PR, pharmaceutics
hydroxypropylmethylcellulose: CM, drug comparison
ial: CM, drug comparison
ial: CT, clinical trial
ial: PD, pharmacology
ial: DT, drug therapy
ial: DO, drug dose
ial: PK, pharmacokinetics
ial: AD, drug administration
ial: AE, adverse drug reaction
lubricating agent: CT, clinical trial
lubricating agent: DT, drug therapy
lubricating agent: PK, pharmacokinetics
lubricating agent: PD, pharmacology
lubricating agent: AD, drug administration
lubricating agent: AE, adverse drug reaction
lubricating agent: DO, drug dose
lubricating agent: CM, drug comparison
methylprednisolone: CM, drug comparison
triamcinolone: CM, drug comparison
vitrax: DO, drug dose
vitrax: CM, drug comparison
vitrax: PK, pharmacokinetics
vitrax: PD, pharmacology
vitrax: AD, drug administration
vitrax: CT, clinical trial
vitrax: AE, adverse drug reaction
vitrax: DT, drug therapy
unclassified drug
RN (**hyaluronic acid**) 31799-91-4, **9004-61-9, 9067-32-7**; (**chondroitin sulfate**) **9007-28-7, 9082-07-9**; (hydroxypropylmethylcellulose) 9004-65-3; (methylprednisolone) 6923-42-8, 83-43-2; (triamcinolone)

124-94-7
CN **Healon; Viscoat;** Amvisc; **Hyalgan;**
Healon gv; Ial; Vitrax

=> fil drugl
FILE 'DRUGLAUNCH' ENTERED AT 17:26:57 ON 15 MAR 2003
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FILE COVERS 1982 TO 25 Feb 2003 (20030225/ED)

```
######################################################################
#                                                                    #
#                    !!! ATTENTION !!!                               #
#                                                                    #
#  Welcome to DRUGLAUNCH.  A special subscriber rate is              #
#  available to purchasers of the IMSworld publication,              #
#  Drug Launches.                                                    #
#                                                                    #
#  For detailed information regarding eligibility and                #
#  authorization for this subscriber discount, please contact        #
#  IMS HEALTH Customer Services directly by phone                    #
#  at +44(0)20-7393-5888, or email globaldirect@uk.imshealth.com     #
#  See HELP SUBSCRIPTION for more information.                       #
#                                                                    #
######################################################################
```

=> d all

L162 ANSWER 1 OF 1 DRUGLAUNCH COPYRIGHT 2003 IMSWORLD

AN 94:42952 DRUGLAUNCH
SO Drug Launches, (27 Jan 1992)
DN 1000793
CN Trade Name: **VISCOAT**
CO Manufacturer: Alcon
CO Corporation: Nestle
LNC Canada
LND Oct 1991
CC N1B Local Anesthetics, except Dermatologicals
COMP Active Ingredient: **sodium hyaluronate;**
chondroitin sulfate.
NC 2
TX Local anesthetic
DOSFM sol
LNP sol 0.5% 15 ml C$106.00 (RPP)

=> fil wpix
FILE 'WPIX' ENTERED AT 17:46:09 ON 15 MAR 2003
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FILE LAST UPDATED: 12 MAR 2003 <20030312/UP>
MOST RECENT DERWENT UPDATE: 200317 <200317/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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/BIX is also provided which comprises both /BI and /ABEX <<<

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=> d all abeq tech abex tot

L188 ANSWER 1 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN **2002-617109** [66] WPIX
DNC **C2002-174439**
TI Chondroprotective/restorative composition useful for treating or preventing osteoarthritis and other joint diseases in mammals comprises **hyaluronic acid** or its salts.
DC A96 B05 C03 D13
IN PIERCE, S W
PA (PIER-I) PIERCE S W
CYC 1
PI US 2002068718 A1 20020606 (200266)* 14p A61K031-715
ADT US 2002068718 A1 Provisional US 2000-237838P 20001003, US 2001-967977 20011002
PRAI US 2000-237838P 20001003; US 2001-967977 20011002
IC ICM A61K031-715
ICS A61K031-70
AB US2002068718 A UPAB: 20021014
NOVELTY - A chondroprotective/restorative composition comprises **hyaluronic acid** or its salts and optionally a pharmaceutical carrier.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a method of treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post operative arthroscopic surgery, deterioration of proper joint function, reduction or inhibition of metabolic activity of chondrocytes, activity of enzymes that degrade cartilage, reduction or inhibition of production of **hyaluronic acid** in mammals comprises oral administration of **hyaluronic acid** or its salt;

(2) an animal feed having chondroprotective/restorative benefits comprising a nutritionally effective feed base selected from grains, proteins, and/or fats, and an **hyaluronic acid** or its salts; and

(3) a therapeutic and chondroprotective/restorative composition comprising **Hyaluronic acid** or its salts, a therapeutic drug, and optionally a pharmaceutical carrier.

ACTIVITY - Osteopathic; Antiarthritic; Anti-inflammatory; Analgesic.

MECHANISM OF ACTION - None given.

USE - Fort treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post operative arthroscopic surgery, deterioration of proper joint function, reduction or inhibition of metabolic activity of chondrocytes, activity of enzymes that degrade cartilage, reduction or inhibition of production of **hyaluronic acid** in mammals. **Hyaluronic acid**, optionally in combination with glucosamine **sulfate** and/or **chondroitin sulfate** is useful in chondroprotective/restorative compositions. The composition is useful in an animal feed comprising a feed base selected from grains, proteins, fats and mixtures of these. The animal feed further includes molasses. The animal feed is in the form of a paste and is a cat, dog or horse feed.
Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: A12-V01; B01-B01; B01-B02; B01-C04; B02-Z; B03-L; B04-B01; B04-C02; B05-A03; B05-B01P; B05-B02C; B05-C; B06-H; B07-H; B10-A04; B10-A06; B10-A07; B10-A08; B10-A10; B10-B02; B10-C04; B10-E04; B10-J02; B14-C01; B14-C03; **B14-C09**; B14-N01; C01-B01; C01-B02; C01-C04; C02-Z; C03-L; C04-B01C; C04-C02; C05-A03; C05-B01P; C05-B02C; C05-C01; C05-C08; C06-H; C07-H; C10-A04; C10-A06; C10-A07; C10-A08; C10-A10; C10-B02; C10-C04; C10-E04; C10-J02; C14-C01; C14-C03; **C14-C09**; C14-N01; D03-C; D03-F06; D03-G; D03-H01T2
TECH UPTX: 20021014

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred drugs: The **hyaluronic acid** is uncrosslinked. The salt of **hyaluronic acid** is **sodium hyaluronate**. The composition further comprises a supplement selected from vitamin A, D and E, ascorbic acid, biotin, pantothenic, choline, niacin, pyridoxine, riboflavin, thiamine, calcium, phosphorus, NaCl, copper, iron, manganese, iodine and combinations of these. Preferred composition: The composition further comprises glucosamine or its salt (preferably glucosamine **sulfate**) and/or **chondroitin** or its salt (preferably **chondroitin sulfate**). Preferably the composition further includes glucosamine **sulfate** and **chondroitin sulfate**. The composition further comprises a drug selected from acetaminophen, acetic acid, acetylsalicylic acid, buffered acetylsalicylic acid, albuterol, albuterol **sulfate**, ethanol isopropanol, allantoin, aloe, aluminum acetate, aluminum carbonate, aluminum chlorohydrate, aluminum hydroxide, alprozolam, amino acids, aminobenzoic acid, amoxicillin, ampicillin, amsacrine, amsalog, anethole, aspartame, atenolol, bacitracin, balsam peru, beclomethasone dipropionate, benzocaine, benzoic acid, benzophenones, benzoyl peroxide, biotin, bisacodyl, bornyl acetate, bromopheniramine maleate, buspirone, caffeine, calamine, calcium, calcium carbonate, calcium casinate, calcium hydroxide, camphor, captopril, cascara sagrada, castor oil, cephalosporins, cefaclor, cefadroxil, cephalexin, cetylalcohol, cetylpyridinium chloride, chelated minerals, chloramphenicol, chlorcyclizine hydrochloride. chlorhexidine gluconate, chloroxylenol, chloropentostatin, chlorpheniramine maleate, cholestyramine resin, choline bitartrate, cimetidine hydrochloride, cinnamedrine hydrochloride, citalopram, citric acid, clenbuterol, cocoa butter, cod liver oil, codeine and codeine phosphate, clonidine, clonidine hydrochloride, clorfibrate, ciprofloxacin HCl, cyanocobalamin, cyclizine hydrochloride, DMSO, danthron, dantrium, dexamethazone, dexbrompheniranime maleate, dextromethorphan hydrobromide, diazapam, dibucaine, diclofenac **sodium**, digoxin, diltiazem, dimethicone, dioxybenzone, diphenhydramine citrate, diphenhydramine hydrochloride, docusate calicum, docusate potassium, docusate **sodium**, doxycycline hyclate, doxylamine succinate, efaroxan, enalapril, enoxacin, erythromycin, estropipate, ethinyl estradiol, ephedrine, epinephrine bitartrate, erythropoietin, eucalyptol, ferrous fumarate, ferrous gluconate, ferrous **sulfate**, folic acid, fosphenytoin, flunixin meglumine, fluoxetine HCl, furosemide, gabapentan, gentamicin, gentocin **sulfate**, gemfibrozil, glipizide, glycerin, glyceryl stearate, griseofulvin, guaifenesin, hexylresorcinol, hydrochlorothiaxide, hydrocodone bitartrate, hydrocortisone, hydrocortisone acetate, 8-hydroxyquinoline **sulfate**, ibuprofen, indomethacin, inositol, insulin, iodine, ipecac, iron, isoxicam, isoxuprine, ketamine, ketofin, koalin, lactic acid, lanolin. lecithin, lidocaine, lidocaine hydrochloride, lifinopril, liotrix, lovastatin, MSM (methylsulfonylmethane), magnesium carbonate, magnesium hydroxide, magnesium salicylate, magnesium trisilocate, mefenamic acid, meclofenanic acid, meclofenamate **sodium**, medroxyprogesterone acetate, methenamine, mandelate, methocarbamol, menthol, meperidine hydrochloride, metaproterenol **sulfate**, methyl nicotinate, methyl salicylate, methylcellulose, methsuximide, metromidazole, metromidazole hydrochloride, metoprolol tartrate, miconazole nitrate, mineral oil,

minoxidil, morphine, naproxen, naproxen **sodium**, nifedipine, neomycin **sulfate**, neomycin-bacitracin, niacin, niacinamide, nicotine, nicotinamide, nitroglycerin, nonoxynol-9, norethindone, norethindone acetate, nystatin, octoxynol, octyl dimethyl PABA, octyl methoxycinnamate, omega-3 polyunsaturated fatty acids, omeprazole, oxolinic acid, oxybenzone, oxtriphylline, para-aminobenzoic acid (PABA), padimate O, paramethadione, penicillin, pentastatin, peppermint oil, pentaerythriol tetranitrate, pentobarbital **sodium**, pheniramine maleate, phenobarbital, phenol, phenolphthalein, phenybutazone, phenylephrine hydrochloride, phenylpropanolamine, phenylpropanolamine hydrochloride, phenytoin, pheneIzine **sulfate**, pirmenol, piroxicam, polymycin B **sulfate**, potassium chloride, potassium nitrate, prazepam, prednisone, prednisolone, procainamide hydrochloride, procaterol, propoxyphene, propoxyphene HCl, propoxyphene napsylate, pramiracetin, pramoxine, pramoxine hydrochloride, propronolol HCI, pseudoephedrine hydrochloride, pseudoephedrine **sulfate**, pyridoxine, quinapril, quinidine gluconate, quinestrol, ralitoline, ranitadine, resorcinol, riboflavin, salicylic acid. sesame oil, shark liver oil, simethicone, **sodium** bicarbonate, **sodium** citrate, **sodium** fluoride, **sodium** monofluorophosphate, sulfa-drugs, sulfanethoxazole, sulfur, tacrine, tacrine HCl, theophylline, terfenidine, thioperidone, trimetrexate, triazolam, timolol maleate, tretinoin, tetracycline hydrochloride, tolmetin, tolnaftate, triamcinolone, triclosan, triprolidine hydrochloride, undecylenic acid, vancomycin, verapamil HCl, vidaribine phosphate, vitamin A, vitamin B, vitamin C, vitamin D, vitamin E, vitamin K, witch hazel, xylometazoline hydrochloride, zinc, zinc **sulfate** and zinc undecylenate. The composition is in the form of a **gel** and comprises water and a sufficient amount of carboxymethylcellulose or its **sodium** salt.

ABEX

ADMINISTRATION - The effective amount of **hyaluronic acid** is 10-2000 mg.

EXAMPLE - A paste was prepared from **sodium hyaluronate** (0.144 wt %), powdered sugar 10X (60.144 wt %), glycerine (0.7 wt %), xanthan gum (0.2 wt %), **sodium** benzoate (0.7 wt %), citric acid anhydrous (0.2 wt %), molasses (23.5 wt %) and water DI (14.4 wt %).

L188 ANSWER 2 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN **2002-303912** [34] WPIX
DNC **C2002-088337**
TI Treatment of allergies, autoimmunity, adhesion cascade, metastatic or coronary cascade diseases e.g. arthritis comprises administration of at least one complex carbohydrate e.g. **chondroitin sulfate**
.
DC A96 B04 D21
IN BROWN, H G; BROWN, K K; COOPER, C A
PA (DERM-N) DERMAL RES LAB INC
CYC 96
PI WO 2002009728 A1 20020207 (200234)* EN 61p A61K031-715
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001081368 A 20020213 (200238) A61K031-715
ADT WO 2002009728 A1 WO 2001-US41473 20010731; AU 2001081368 A AU 2001-81368 20010731
FDT AU 2001081368 A Based on WO 200209728
PRAI US 2000-222046P 20000731
IC ICM A61K031-715
AB WO 200209728 A UPAB: 20020528

NOVELTY - Treatment/prevention of diseases and conditions associated with allergies, autoimmunity, adhesion, metastatic or coronary cascades involves administration of at least one complex carbohydrate or a composition comprising at least one low purity or cosmetic grade complex carbohydrate and at least one transdermal or transmucosal carrier to deliver the complex carbohydrate into the blood stream.

DETAILED DESCRIPTION - Treatment or prevention of diseases associated with allergies, autoimmunity, adhesion cascade, metastatic cascade or coronary cascade involves: administration of at least one complex carbohydrate as sole active ingredient or a composition comprising at least one low purity or cosmetic grade complex carbohydrate as an active ingredient and at least one transdermal or transmucosal carrier to deliver the complex carbohydrate into the blood stream. The complex carbohydrate is oligosaccharide, sialylated oligosaccharide, polysaccharide or glycosaminoglycan.

INDEPENDENT CLAIMS are also included for the following:

(1) interrupting the adhesion cascade by blocking the ability of leukocyte to bind to blood vessel walls, involving contacting the complex carbohydrate with receptor sites on leukocytes to inhibit the ability of the leukocyte to bind to the blood vessel walls to inhibit the motility to the site of trauma and thus reducing pain and swelling;

(2) a bandage comprising either at least one complex carbohydrate and the carrier resulting in topical or mucosal delivery of the molecules, through the skin or mucous membranes of mammals and into the bloodstream or comprising only the complex carbohydrate added to it or imbedded in it. The bandage is applied onto an area requiring treatment; and

(3) blocking the ability of tumor cells to tether to blood vessel walls by contacting the complex carbohydrates with receptor sites on tumor cells to inhibit the ability of the tumor cells to bind to the blood vessel walls and inhibit the tumor motility which, in turn, inhibits the potential for metastasis.

ACTIVITY - Immunosuppressive; Antiarthritic; Antirheumatic; Antiinflammatory; Antiulcer; Virucide; Antiallergic; Nootropic; Dermatological; Vasotropic; Vulnerary; Analgesic; Gynecological; Antiasthmatic; Antipruritic; Thrombolytic; Anticonvulsant; Tranquilizer; Neuroleptic; Neuroprotective; Antiparkinsonian; Cerebroprotective; Hypotensive; Cardiant; Anticoagulant; Anti-HIV; Antibacterial; Virucide; Antiseborrheic; Cytostatic; Antidiabetic; Antidepressant; Osteopathic.

MECHANISM OF ACTION - Macrophage inhibitor; T-cell inhibitor; Metastasis inhibitor; Tumor cell blocker; Amyloid plaque inhibitor; Leukocyte (CD44 and CD31) and RHAMM agonist; Leukocyte inhibitor.

USE - In the treatment of diseases associated with allergies, autoimmunity, adhesion cascade, metastatic cascade or coronary cascade e.g. arthritis, gastritis, colitis, stomach or intestinal ulcer, esophagitis, bronchitis, common cold, rhinitis, sore throat, tonsillitis, tendonitis, fibromyalgia, chronic fatigue syndrome, interstitial cystitis, polymyositis, autism, Lupus Erythematosis, headache, pancreatitis, anaphylaxis, vaginitis, hemorrhoids, sunburn, heat burn, temporomandibular joint (TMJ) condition, gingivitis, dental caries, dental pain, post surgical pain, menstrual pain, extremity cramp, pre and post partum pain, itching associated with allergies and hypersensitivity, asthma, emphysema, thrombosis, Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder (ADHD), Turret's Syndrome, multiple sclerosis, Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's Disease, Parkinson's Disease, Bell's Palsy, cerebral palsy, peripheral neuropathy, high blood pressure, heart disease, heart attack, vasculitis, stroke, increased degradation of spinal nerves post spinal cord injury, head and brain trauma post injury, encephalitis, epilepsy, Guillain-Barre syndrome, Human Immunodeficiency Virus infection, yeast infections, bacterial infections, viral infections, meningitis, peripheral neuropathy, Creuztfeldt-Jacob Disease, acne, cognitive disorder, adhesion formation post surgery or chemotherapy, scar formation post surgery, non-healing wounds, decubutis ulcers, irritation of nerve ganglion formation, Alzheimer's disease, human immunodeficiency

disease, ovarian cancer, lick granulomas, hot spots, eczema, wrinkling of skin, diabetes, scleroderma, skin problems, osteoarthritis, rashes, dementia, pain associated with cervical disc degeneration and hair loss; for inhibiting macrophages; for reducing scar tissue; as bandage (all claimed). Also in the treatment of rheumatoid arthritis, irritated or inflamed muscles, cramped muscles, inflamed tendons, inflamed nerves or nerve bundles (e.g. inflamed ganglion, trigger points), swollen and painful joints, inflamed bladder, bruised tissue, tired feet, open wounds, decubitis ulcers, inflamed stomach or intestinal lining, inflamed bronchi or esophagial lining, adhesions formed after surgery, trauma or chemotherapy, pain post surgery, dental work or injury, plaques formed on veins or arteries leading to heart disease and stroke, inflammation associated with Alzheimer's Disease, head or brain trauma, degration of the spinal cord post spinal cord injury, pain associated with insect bites or stings, tumor formation and tumor metastasis. The composition stimulates the healing of open wounds, increases cognitive function, thickens hair and fingernails, increases suppleness of skin.

ADVANTAGE - The method does not require pharmaceutical grade complex carbohydrates for the administration. As the composition is applied topically, orally, mucosally or parenterally the contaminants do not produce any adverse reactions.

Dwg.0/2

FS CPI

FA AB; DCN

MC CPI: A12-V01; A12-V03A; B04-C02D; B04-C02E2; B14-A01; B14-A02; B14-A04; B14-C01; B14-C03; B14-C06; **B14-C09**; B14-E04; B14-E08; B14-E10; B14-F01B; B14-F02; B14-F04; B14-G02A; B14-G02D; B14-H01; B14-J01A2; B14-J01A3; B14-J01A4; B14-J01B4; B14-J05; B14-K01A; B14-L06; B14-N06A; B14-N07; B14-N13; B14-N14; B14-N16; B14-N17; B14-S01; B14-S04; D08-A05; D09-C

TECH UPTX: 20020528

TECHNOLOGY FOCUS - BIOLOGY - The reactive cells are white blood cells.

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: The treatment step involves administering a mixture of high and low molecular weight **sodium hyaluronate.**

ABEX

SPECIFIC COMPOUNDS - **Sodium hyaluronate** and **chondroitin sulfate** are specifically claimed as the complex carbohydrates.

ADMINISTRATION - The composition is administered orally, topically, mucosally or parenterally (claimed) on a repeated basis. The parenteral administration includes intramuscular, intravenous, subcutaneous, intradermal, intraperitoneal or injection routes. The composition is administered in a dosage of 0.000001 - 150 (preferably 0.001 - 100, especially 0.01 - 20) mg/kg.

EXAMPLE - A formulation (A) comprising **hyaluronic acid** powder made up to a 1% solution in deionized, distilled water was prepared. One half of the final 1% solution was removed and its molecular weight was broken down by alkaline hydrolysis. The pH was adjusted to 11 - 14 using 10N NaOH. The solution was then heated to a temperature of 37 - 50degreesC. When a molecular weight of 10000 - 50000 was obtained, the pH was adjusted back to neutral (pH = 6 - 7). The final mixture was prepared by combining 1 liter of the low molecular weight preparation with 1 liter of the original 1% solution of **sodium hyaluronate**. An 18 year old female suffering from chronic fibromyalgia localized in the face and neck for 5 years was used for study. Prior to use of (A), she had taken pain relievers, acupuncture and numerous other procedures to treat the condition. Nothing had provided substantial relief without severe side effects. She was given (A). She was asked to take (A) orally, holding the liquid in the mouth for several seconds to allow mucosal adsorption before swallowing it. She took 10 mg twice/day (0.2 mg/kg). She reported that

after only 1 day, her symptoms were improved. After one week of daily use, she reported no pain. She continued the treatment for 6 months and reported no return of fibromylagia.

L188 ANSWER 3 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN **1999-246164** [21] WPIX
DNC **C1999-072009**
TI **Intra-articular** composition useful for treatment of arthropathy, comprises microcapsules comprising high-molecular substance and drug.
DC A11 A96 B05 B07 P32
IN IMAMORI, K; ISHIGAKI, K; KASAI, S; OKADA, M; ONO, K; SUZUKI, M
PA (SSSE) SSP CO LTD; (SSSE) SS PHARM CO; (SSSE) SS SEIYAKU KK
CYC 30
PI EP 911025 A1 19990428 (199921)* EN 28p A61K009-56
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CN 1215589 A 19990505 (199936) A61K009-50
CA 2251277 A1 19990427 (199941) EN A61K009-50
JP 11222425 A 19990817 (199943) 12p A61K009-50
KR 99037138 A 19990525 (200032) A61K009-50
US 6197326 B1 20010306 (200115) A61F002-00
US 6428804 B1 20020806 (200254) A61F002-00
ADT EP 911025 A1 EP 1998-119414 19981014; CN 1215589 A CN 1998-124109 19981027; CA 2251277 A1 CA 1998-2251277 19981020; JP 11222425 A JP 1998-293385 19981015; KR 99037138 A KR 1998-43234 19981015; US 6197326 B1 US 1998-172271 19981014; US 6428804 B1 Cont of US 1998-172271 19981014, US 2000-706762 20001107
PRAI JP 1997-294009 19971027
IC ICM A61F002-00; A61K009-50; A61K009-56
ICS A61F013-00; A61K009-08; A61K009-10; A61K009-107; A61K009-14; A61K009-52; A61K031-00; A61K031-57; A61K031-715; A61K031-73; A61K031-765; A61K031-78; A61K045-00; A61K047-30
AB EP 911025 A UPAB: 20011203
NOVELTY - A new **intra-articular** composition is useful for the treatment of arthropathy and comprises micro capsules comprising a high-molecular substance, which has biodegradability and biocompatibility, and a drug.
USE - The composition is useful for the treatment of arthropathy and it is incorporated into the synovium or peripheral tissue within joints where it releases the drug over a sustained period of time.
ADVANTAGE - The composition makes it possible to increase the concentration of a drug at a target area in a joint, to avoid general side effects, and to allow the sustained release of the drug, hence allowing the maintenance of the drug's efficacy over a long period of time.
DESCRIPTION OF DRAWING(S) - The graph shows the relationship between time (days) and predonisolone released (%) from the predonisolone containing micro capsules (see example). It can be seen that the release is gradual over time in these compositions, e.g. only 70 % predonisolone released after 21 days, compared with 100 % predonisolone released after 1 day with compositions comprising bulk powder predonisolone.
Dwg.2/14
FS CPI GMPI
FA AB; GI; DCN
MC CPI: A12-V01; B01-B02; B01-B03; B01-C02; B04-C03; B05-A01B; B05-A03B; B05-B01J; B06-B02; B06-D01; B06-D02; B06-D09; B06-F02; B06-F03; B06-F04; B07-A02A; B07-A02B; B07-D04B; B07-D04C; B07-D09; B07-D13; B07-E01; B10-A07; B10-A10; B10-A23; B10-B02A; B10-B02D; B10-C03; B10-C04B; B10-C04C; B10-C04E; B10-F02; B12-M10A; B12-M11E
TECH UPTX: 19990603
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Micro capsules: The micro capsules have an average particle size of 5-530 mum.
Preferred Drug: The drug is a steroidal agent, non steroidal

antiphlogistic, antirheumatic, immunoregulator, immunosuppressor or articular flow improver. The drug is at least one of dexamethasone, hydrocortisone, triamcinolone, beta-methosone, predonisolone, methylpredonisolone, halopredone, beclomethasone, deprodone, diclofenac, indomethacin, ibuprofen, ketoprofen, aspirin, diflunisal, fulfenamic acid, floctafenine, tolfenamic acid, sulindac, fenbufen, salicylic acid, acemetacin, proglumetacin, nabumetone, protizinic acid, thiaprofen, oxaprozin, loxoprofen, alminoprofen, zaltoprofen, flurbiprofen, flurbiprofen axetil, piroxicam, tenoxicam, ampiroxicam, meloxicam, D-penicillamine, bucillamine, gold **sodium** thiomalate, auranofin, lobenzarit, salazosulfapyridine, methotrexate, cyclophosphamide, azathioprine, mizoribine, cyclosporin and **hyaluronic acid** and salts thereof. The drug is present in the composition at 1-80 wt. %.

Preferred Composition: The composition is administered in a form suspended in a microcapsule dispersing medium containing at least one of **hyaluronic acid, chondroitin sulfate** and salts thereof.

TECHNOLOGY FOCUS - POLYMERS - Preferred High-Molecular Substance: The substance is at least one biodegradable, biocompatible high-molecular weight substance selected from homopolymers and copolymers of lactic acid, glycolic acid, caprolactone, valerolactone, butyrolactone, amino acids, alkyl cyanoacrylates and hydroxybutyrates; albumin; gelatin; starch; casein; and chitosan (preferably starch).

ABEX

ADMINSTRATION - The dosage form is an injection (claimed).

EXAMPLE - Lactic acid-glycolic acid copolymer (PLGA; comonomer molar ratio: 50/50, wt, average molecular wt. 124000) (2.5 g) and predonisolone (0.278 g) were dissolved in methylene chloride (347.2 g). The solution was sprayed in a spray granulator to give the desired micro capsules with a predonisolone content of 10.1 % and an average particle size of 5.61 mum. The micro capsules (0.5 mg) and bulk powder of predonisolone (0.5 mg) were placed in 10 ml aliquots of a phosphate buffer at pH 6.8, respectively, and the dissolved amount measured regularly. The results are shown in the graph. Generally it has been shown the release of predonisolone from the predonisolone-containing micro capsules was delayed compared with predonisolone from bulk powder of predonisolone.

L188 ANSWER 4 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN **1994-036539** [05] WPIX
DNC **C1994-016777**
TI Compsns. for treating rheumatoid arthritis - contg. lipid-bound glycosaminoglycan..
DC B04
IN AOKI, S; IWASAKI, S; KIMATA, K; SUGIURA, N; SUZUKI, S
PA (SEGK) SEIKAGAKU KOGYO CO LTD
CYC 18
PI EP 581282 A1 19940202 (199405)* EN 25p A61K031-735
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
AU 9344314 A 19940203 (199411) A61K031-725
JP 06072893 A 19940315 (199415) 22p A61K037-20
CA 2101482 A 19940131 (199416) A61K031-725
US 5470578 A 19951128 (199602) 18p A61K037-22
AU 668963 B 19960523 (199628) A61K031-725
EP 581282 B1 19990512 (199923) EN A61K031-735
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69324859 E 19990617 (199930) A61K031-735
ADT EP 581282 A1 EP 1993-112169 19930729; AU 9344314 A AU 1993-44314 19930729; JP 06072893 A JP 1992-203558 19920730; CA 2101482 A CA 1993-2101482 19930728; US 5470578 A US 1993-98936 19930729; AU 668963 B AU 1993-44314 19930729; EP 581282 B1 EP 1993-112169 19930729; DE 69324859 E DE 1993-624859 19930729, EP 1993-112169 19930729

FDT AU 668963 B Previous Publ. AU 9344314; DE 69324859 E Based on EP 581282
PRAI JP 1992-203558 19920730
REP 4.Jnl.Ref; EP 466966; EP 493622
IC ICM A61K031-725; A61K031-735; A61K037-20; A61K037-22
ICS A61K009-48; A61K031-715; C07H005-06
AB EP 581282 A UPAB: 19940315
Antirheumatic compsns. comprise a lipid-bound glycosaminoglycan (I) opt. in salt form, and a carrier. (I) are described in JA4-80201 and 4-80202.
(I) comprises **chondroitin sulphate**, dermatan **sulphate** or **hyaluronic acid** bound to a glycerolipid, pref. a glycerophospholipid or glyceride, esp. phosphatidyl ethanolamine (PE) or phosphatidyl serine. (I) is prepd. by oxidising the reducing terminal of the glycosaminoglycan, lactonising the prod. and reacting the lactone with an NH2-contg. lipid to form an amide bond. Binding may also be via an aminoalkyl or ester bond. The compsns. are formulated as solns. for **intra-articular** injection.
ADVANTAGE - The compsns. inhibit adhesion of inflammatory synovial membrane cells to joint cartilage tissue, alleviate inflammation of the synovial membrane, and have no toxicity or side effects.
Dwg.1/5
FS CPI
FA AB; DCN
MC CPI: B04-C02V; B14-C06
ABEQ US 5470578 A UPAB: 19960115
A method of treating rheumatism which comprises administering to mammals suffering from rheumatism a composition comprising between 0.1 to 80% lipid-bound glycosaminoglycan (gag) or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier, wherein said composition is administered in a dose of 0.1 to 2,000 mg/adult once a day or within several weeks.
Dwg.0/3

=> d his

(FILE 'HOME' ENTERED AT 16:16:14 ON 15 MAR 2003)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 16:16:25 ON 15 MAR 2003
E CHONDROITIN SULFATE/CN
L1 1 S E3
L2 136 S 9007-27-6/CRN AND 7664-93-9/CRN
L3 11 S L2 AND 2/NC
L4 3 S L2 AND 9067-32-7/CRN
L5 2 S L4 NOT C4H6O2S
L6 1 S 9067-32-7
L7 1 S 9004-61-9
L8 3 S 9004-61-9/CRN AND L2
L9 1 S L8 AND 3/NC

FILE 'HCAPLUS' ENTERED AT 16:18:30 ON 15 MAR 2003
L10 9 S L5 OR L9
L11 7390 S L1 OR L3
L12 11657 S CHONDROITIN(S)(SULFATE OR SULPHATE)
L13 361 S CHONDROITINSULFATE OR CHONDROITINSULPHATE
L14 200 S CHONDROITIN()(SULFURIC OR SULPHURIC)()ACID
L15 11512 S CHONDROITIN(1W)(SULFATE OR SULPHATE OR (SULFURIC OR SULPHURIC
L16 1628 S (CHONDROITINSULFURIC OR CHONDROITINSULPHURIC)()ACID
L17 13151 S L11-L16
L18 1406 S L6
L19 1729 S (NA OR SODIUM)()(HYALURONATE OR HYALURON OR HYALURONIC ACID)
L20 83 S HEALON OR HYALGAN
L21 25 S ARTZ OR FCH 200

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L22         1862 S L18-L21
L23         9531 S L7
L24        12860 S HYALURONATE OR HYALURON OR HYALURONIC ACID
L25         2450 S HYALURONAN
L26           65 S HYALURONAN (S) (NA OR SODIUM OR SODIUM SALT)
L27         4638 S L17 AND L19-L26
L28          247 S L27 AND L22

     FILE 'REGISTRY' ENTERED AT 16:28:28 ON 15 MAR 2003
L29           11 S L1 OR L3
                 SEL RN
L30           58 S E1-E11/CRN
L31           56 S L30 NOT L5,L9
L32           38 S L31 NOT (MXS OR IDS)/CI
L33           18 S L31 NOT L32
L34          262 S CHONDROITIN(L)SULFATE
L35           88 S L34 AND SALT
L36           63 S L35 NOT (MXS OR IDS)/CI
L37           31 S L36 NOT (COMPD OR WITH)

     FILE 'HCAPLUS' ENTERED AT 16:31:37 ON 15 MAR 2003
L38          484 S L37
L39        13232 S L17,L38
L40          260 S L39 AND L22
L41         4647 S L39 AND L23-L26
L42          260 S L40,L41 AND L22
L43          260 S L28,L42
L44           50 S L43 AND GEL?
L45           24 S L43 AND VISCOELAST?
L46            1 S L43 AND INTRAARTICUL?
L47            2 S L43 AND INTRA ARTICUL?
L48           72 S L44,L45 NOT L46,L47
L49           23 S L48 AND EYE?/CW
                 SEL DN AN 17
L50            1 S L49 AND E12-E14
L51           49 S L48 NOT L49
                 SEL DN AN 5 24 38
L52            3 S E15-E23 AND L51
                 E CARTILAGE/CT
L53        11561 S E3-E25
                 E E3+ALL
L54        14712 S E7+NT
                 E JOINT/CT
L55         4768 S E6-E28
                 E E5+ALL
L56         1255 S E2
                 E JOINT/CT
                 E E6+ALL
L57         8912 S E6,E5+NT
L58         2604 S E13+NT
                 E OSTEOARTHRITIS/CT
L59         1853 S E3
                 E E3+ALL
L60         2870 S E11,E12,E10+NT
L61            7 S CHONDRAL(L)LESION
L62           72 S ?CHONDRAL?(L)LESION
L63           17 S L43 AND L53-L62
                 SEL DN AN 3
L64            1 S L63 AND E1-E3
                 SEL DN AN L63 1 5 17
L65            3 S E4-E12 AND L63
L66           15 S L10,L50,L52,L64,L65
                 E OCHOA/AU
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L67           7 S E95
                E HERMIDA/AU
                E HUMBERTO/AU
                E ALCON/PA,CS
                E ALCOM/PA,CS
L68         786 S E3-E8
L69         785 S ALCON?/PA,CS
L70          12 S L67-L69 AND L43
L71           1 S L67-L69 AND L10
L72           2 S L67-L69 AND L66
L73          15 S L66,L71,L72
L74          10 S L70 NOT L73
L75          15 S L73 AND L10-L28,L38-L74
L76          10 S L74 AND L10-L28,L38-L75

     FILE 'REGISTRY' ENTERED AT 16:53:16 ON 15 MAR 2003
L77           3 S L5 OR L9

     FILE 'HCAPLUS' ENTERED AT 16:54:37 ON 15 MAR 2003

     FILE 'MEDLINE' ENTERED AT 16:55:10 ON 15 MAR 2003
L78          56 S L77
L79          75 S VISCOAT
L80          75 S L78,L79
L81        3497 S L29 OR L37
L82        8170 S L12-L16
L83        7265 S CHONDROITIN()(SULFATE OR SULPHATE)
                E CHONDROITIN SULFATE/CT
                E E18+ALL
L84        3467 S E7/CT,CN
L85        8170 S L81-L83
L86        3497 S L1 OR L3
L87        8170 S L85,L86
L88         888 S L18-L21
L89       10799 S L24-L26
L90           0 S L6
L91        7519 S L7
L92       10849 S L88-L91
                E HYALURONIC ACID/CT
                E E3+AL
                E E3+ALL
L93        7519 S E20/CT,CN
L94       10849 S L92,L93
L95        2288 S L87 AND L94
                E CARTILAGE/CT
                E E3+ALL
L96       42363 S E6+NT
                E CARTILAGE/CT
                E E6+ALL
L97        7773 S E6+NT
                E OSTEOARTHRITIS/CT
                E E3+ALL
L98       21860 S E11+NT
                E JOINT/CT
                E E4+ALL
L99      102887 S E4+NT
                E E4+ALL
                E JOINT DISEASE/CT
                E E5+ALL
L100     165332 S E3+NT
                E KNEE/CT
L101       5874 S E3+NT
                E SHOULDER/CT
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L102        5032 S E3+NT
                 E E4+ALL
                 E SACROILIAC/CT
                 E E4+ALL
L103        1966 S E5+NT
                 E COXOFEMER/CT
                 E ANKLE/CT
L104        3343 S E3+NT
                 E ELBOW/CT
L105        3209 S E3+NT
L106        4957 S E4+NT
                 E WRIST/CT
L107        3805 S E3+NT
                 E INTERPHALANG/CT
                 E E5+ALL
L108         934 S E2+NT
L109        1092 S ?CHONDRAL?(L)LESION
L110         441 S L95 AND L96-L109
                 E INTRAARTICULAR/CT
                 E E4+ALL
L111           6 S L110 AND E2+NT
                 E E2+ALL
L112           0 S L80 AND L96-L109
L113           0 S L110 AND L80
L114           8 S L92 (L) TU/CT AND L110
                 SEL DN AN 3 6 8
L115           5 S L114 NOT E1-E9
L116          26 S L92 (L) (AD OR PD OR PK)/CT AND L110
L117           6 S L116 AND CHONDROITIN SULFATES (L) ME/CT
L118          20 S L116 NOT L117
L119          13 S L118 AND CHONDROITIN SULFATES/CT,CN
L120           7 S L118 NOT L119
L121          18 S L115,L119
                 SEL DN AN 5-7 13 15 18
L122          12 S L121 NOT E10-E27
L123          10 S L122 NOT EXOGENOUS/TI
                 SEL DN AN 2 8
L124           2 S L123 AND E28-E33

     FILE 'MEDLINE' ENTERED AT 17:13:33 ON 15 MAR 2003

     FILE 'EMBASE' ENTERED AT 17:13:39 ON 15 MAR 2003
L125         123 S L80
L126        4438 S L81
L127        7594 S L12-L16
L128        6445 S L83
                 E CHONDROITIN SULFATE/CT
                 E E3+ALL
L129        3628 S E1
L130        7594 S L126-L129
L131        7527 S L6 OR L7
L132       10048 S L19,L20,L21,L24,L25,L26
L133        7594 S L37 OR L130
L134       10048 S L131,L132
L135        2276 S L133 AND L134
L136        2294 S L125,L135
                 E CARTILAGE/CT
                 E E3+ALL
L137       22568 S E3+NT
                 E E16+ALL
L138       11877 S E4+NT
                 E JOINT/CT
                 E E3+ALL
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L139      95195 S E3+NT
L140      54903 S E8-E44
L141        936 S ?CHONDRAL?(L)LESION
                E OSTEOARTHRITIS/CT
                E E3+ALL
L142      13443 S E26+NT
                E JOINT DISEASE/CT
                E E4+ALL
                E E2+ALL
L143     163212 S E4+NT
L144        433 S L136 AND L137-L143
                E INTRAARTICULAR/CT
                E E6+ALL
L145       3689 S E1+NT
L146         40 S L144 AND L145
L147         14 S L146 NOT AB/FA
L148          4 S L144 AND (NA OR SODIUM)()HYALUR?
L149        255 S L144 AND L6
L150          3 S L148 AND L149
L151          2 S L125 AND L144
                SEL DN AN 2
L152          1 S L151 AND E1-E2
L153          1 S L152 AND L125-L152

     FILE 'EMBASE' ENTERED AT 17:24:12 ON 15 MAR 2003

     FILE 'DRUGLAUNCH' ENTERED AT 17:24:20 ON 15 MAR 2003
                E HYALUR
L154        311 S E4-E6,E8
L155        331 S L19,L20,L24,L25,L26
L156        331 S L154,L155
L157        184 S L12,L16,L83
L158         18 S L79
L159        146 S HYALURON?(L)SODIUM
L160         12 S L156,L159 AND L157
L161         23 S L158,L160
L162          1 S L161 NOT OPHTHALM?/CC

     FILE 'DRUGLAUNCH' ENTERED AT 17:26:57 ON 15 MAR 2003

     FILE 'WPIX' ENTERED AT 17:27:09 ON 15 MAR 2003
L163       2462 S L156,L159
                E SODIUM HYALURON/DCN
                E E4+ALL
L164        147 S E2
L165          0 S R07175/PLE
L166       2492 S L163,L164
L167       1556 S (C08B037-08 OR C08L005-08)/IC,ICM,ICS
L168       3738 S L163-L167
L169       2563 S L156/BIX OR L159/BIX
L170       3827 S L168,L169
L171       1161 S L83/BIX OR L12/BIX OR L13/BIX OR L14/BIX OR L15/BIX OR L16/BI
                E CHONDROITIN/DCN
                E E4+ALL
L172        794 S E2 OR 1875/DRN OR R01875/PLE
L173        292 S E4
L174         52 S E6
L175        585 S L171-L174 AND L170
L176         14 S L79/BIX
L177        489 S L175 AND HYALURON?/BIX AND CHONDROITIN?/BIX
L178         94 S L177 AND (GEL OR VISCOELAST? OR VISCO ELAST?)/BIX
L179          8 S L177 AND (?INTRAARTICUL? OR ?INTRA ARTICUL?)/BIX
                SEL DN AN 5 8
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L180          2 S L179 AND E1-E4
L181         31 S P421/M0,M1,M2,M3,M4,M5,M6 AND L175
L182          5 S L175 AND (B14-C09A OR C14-C09A)/MC
L183         27 S L175 AND (B14-C09? OR C14-C09?)/MC
L184         36 S L181-L183
L185          3 S A61P019-02/IC,ICM,ICS,ICA,ICI AND L175
L186         34 S L184 NOT L185
                SEL DN AN 3 8
L187          2 S E5-E8
L188          4 S L180,L187 AND L163-L187

     FILE 'WPIX' ENTERED AT 17:46:09 ON 15 MAR 2003
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